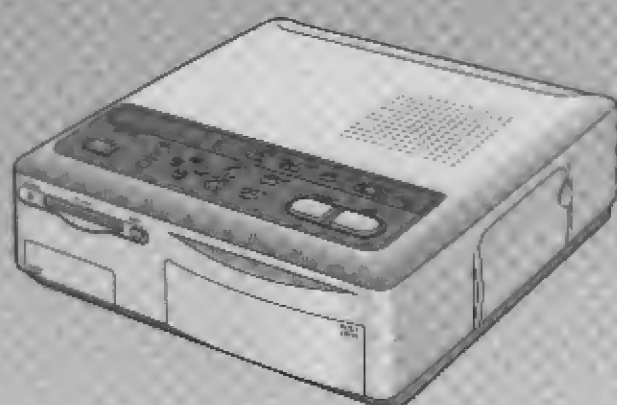


Panasonic

Digital Photo Printer

PV-PD2000

Operating Instructions



For assistance, call 1-800-272-7033.

Please read these instructions thoroughly before operating this product.

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LSQT0071

Dear Customer,

We would like to take this opportunity to thank you for purchasing this Panasonic Digital Photo Printer. Please read these Operating Instructions carefully and keep them handy for future reference.

■IMPORTANT

Please respect all copyrights.

Whatever you have recorded and created can be used for your personal entertainment only. Under copyright laws, it cannot be used without obtaining permission from the holders of the copyrights.

- "Microsoft Windows" is a trademark of Microsoft Corporation in the United States.
- The name "Apple", Macintosh and System are either registered trademarks or trademarks of Apple Computer Inc.
- Other model names, company names, product names, etc. mentioned in this manual are either the trademarks or registered trademarks of the companies concerned.

WARNING

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE ONLY THE RECOMMENDED ACCESSORIES AND DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

DO NOT REMOVE THE COVER (OR BACK); THERE ARE NOT USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

- As this equipment gets hot during use, operate it in well ventilated place; do not install this equipment in a confined space such as a book case or similar unit.

(U.S. only)

This device complies with Part 15 of the FCC Rules. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS :

- (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE. AND
- (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED. INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

(Canada Only)

COMPLIES WITH CLASS B LIMITS OF ICES-003 OF INDUSTRY CANADA.
CONFORME AUX LIMITES PRESCRITES POUR APPAREILS DE CLASSE B DE LA NORME NMB-003 D'INDUSTRIE CANADA.

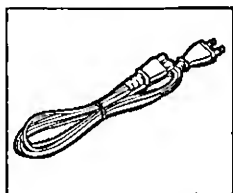
FCC NOTE: (U.S. only)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

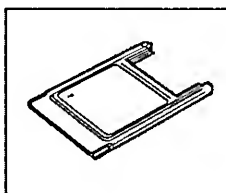
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution : To assure continued compliance, follow the attached installation instructions and use only shielded cables when connecting to computer or other devices. Also, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

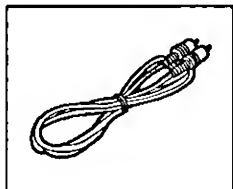
Standard Accessories



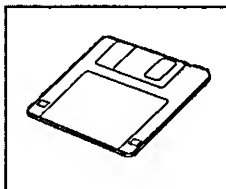
Power Cable
(p.9)



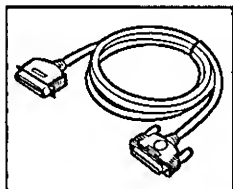
PC Card Adapter
(p.26)



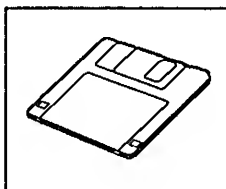
Video Cable
(p.9)



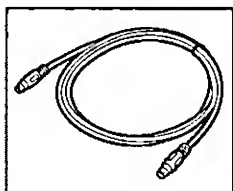
Printer Driver Software for
Windows 95



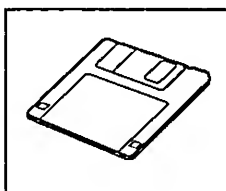
PC Connection Cable for
Windows
(p.46)



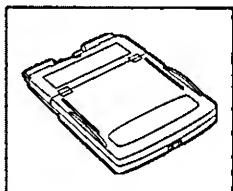
Printer Driver Software for
Windows 3.1



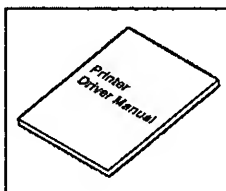
PC Connection Cable for
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Printer Driver Software for
Macintosh




Paper Cassette
(p.12)



Printer Driver Manual

Usable Paper for Printing

Use Print Sets that either bear the  mark or have been designated by Panasonic as suitable for this Digital Photo Printer.

■Standard paper

The Print Set (PV-MPS50; 50 sheets) is required (sold separately).

This paper can be used as a postcard if you affix the proper postage.

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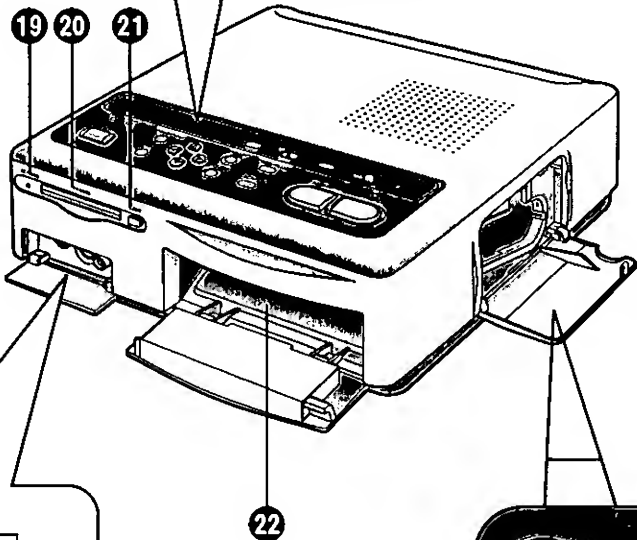
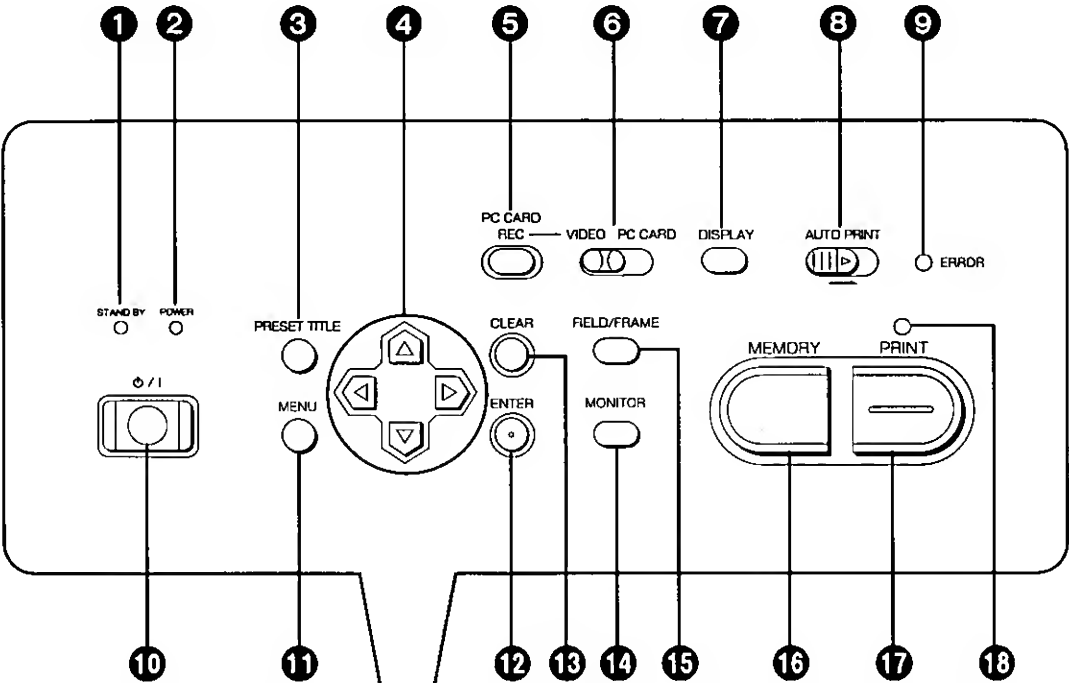
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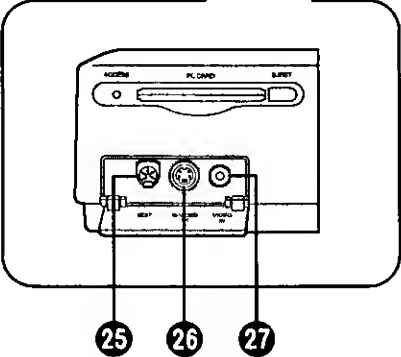
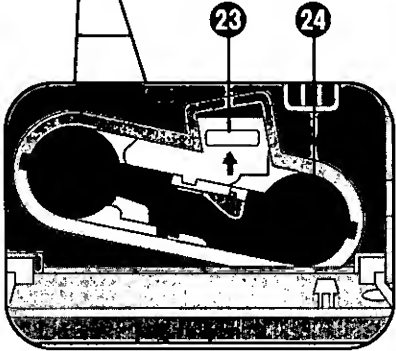
Index. Back Cover





Precautions,
etc.

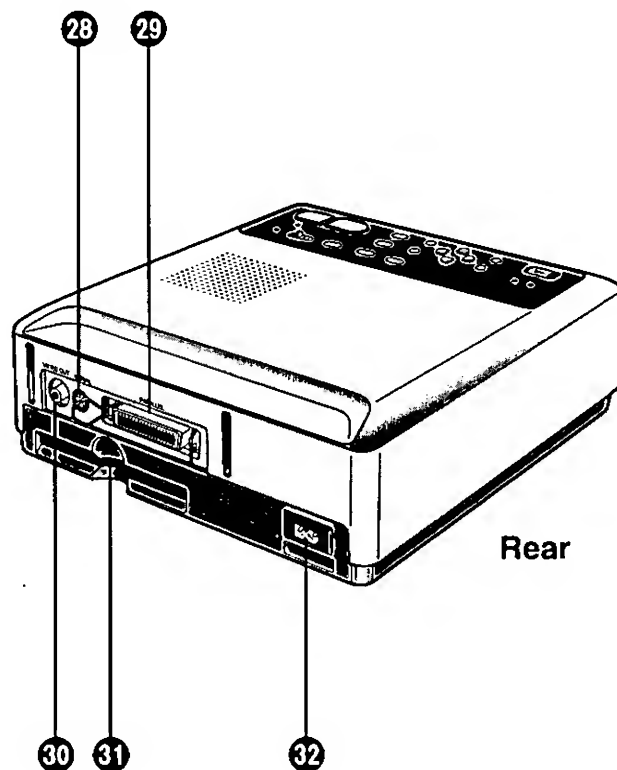
Front



Side



- ❶ **STAND BY Lamp (p.15, 29)**
This lamp lights up when the Printer is plugged into the outlet and the  / I (Power) Button is set to off.
- ❷ **POWER Lamp (p.14, 28)**
This lamp lights up when the  / I (Power) Button is pressed and the Printer is turned on. When the power is turned off, the Printer goes into STAND BY Mode and the STAND BY Lamp lights up.
- ❸ **PRESET TITLE Button (p.40)**
Use this button to insert one of the included trimming frames or titles for printing.
- ❹ **◀▲▼▶ Button (p.16, 29)**
Use these buttons to select the menu contents or select the PC Card image.
- ❺ **PC CARD REC Button (p.39)**
Use this button to record the image from the VIDEO IN (or S-VIDEO IN) Socket to the PC Card.
- ❻ **INPUT SELECT (VIDEO / PC CARD) Switch (p.14, 28)**
Use this switch to select either VIDEO IN (or S-VIDEO IN) Socket or PC CARD for input of the image to be printed. Either setting can be used when printing from a computer.
- ❼ **DISPLAY Button (p.28)**
Use this button to switch between the Single-image and Index Screen when displaying the images stored in the PC Card.
- ❽ **AUTO PRINT Lever (p.31)**
Use this lever to batch print the images stored in the PC Card.
- ❾ **ERROR Lamp (p.56)**
This lamp flashes when a problem that prevents normal printing has occurred, such as paper jamming or running out of printing paper or ink. A corresponding error message also appears on the television screen.
- ❿ ** / I (Power) Button (p.14, 28)**
Use this button to turn the Printer on and off. When the Printer is turned off, all data stored in the memory is lost.
- ⓫ **MENU Button (p.16, 32)**
Use this button to display the MENU Screen. Various printer functions can be selected at the MENU Screen. The ◀▲▼▶ Buttons, ENTER Button, INPUT SELECT Switch, and the  / I (Power) Button are the only buttons and switches that function while the MENU Screen is displayed.
- ⓬ **ENTER Button (p.17, 33)**
Use this button to execute the items selected in MENU Mode.
- ⓭ **CLEAR Button (p.14)**
Use this button to erase the image stored in memory, cancel printing of multiple prints, cancel batch printing, or cancel the settings.
- ⓮ **MONITOR Button (p.14)**
During video input, this button switches between the image from the video source and the image stored in memory.
- ⓯ **FIELD/FRAME Button (p.14)**
Use this button when storing a fast-moving image in memory or when the image stored in memory is blurred.
- ⓰ **MEMORY Button (p.15, 31)**
Use this button to store the image currently displayed on the television screen in memory.
- ⓱ **PRINT Button (p.15, 28)**
Use this button to print pictures. No buttons function while printing is in progress.
- ⓲ **PRINT Lamp (p.15, 28)**
This lamp lights up when the MEMORY Button is pressed. This lamp flashes while printing is in progress.
- ⓳ **ACCESS Lamp (p.27)**
This lamp lights up when image data from an inserted PC Card is being read or stored.
- ⓴ **PC Card Slot (p.27)**
The PC Card is inserted here.
- ⓵ **PC Card EJECT Button (p.27)**
Use this button to eject the PC Card.
- ⓶ **Paper Cassette Slot (p.13)**
The Paper Cassette is loaded here.
- ⓷ **Ink Cassette EJECT Lever (p.13)**
Raise this lever to eject the Ink Cassette.
- ⓸ **Ink Cassette Slot (p.13)**
The Ink Cassette is inserted here.
- ⓹ **EDIT Socket (p.10)**
Connecting this Printer to the Panasonic Digital Video Camera using the System Cable (sold separately) lets you automatically search for and print still images that were recorded with the digital photo-shot function. For details, refer to the Operating Instructions for the Digital Video Camera.
- ⓺ **S-VIDEO IN Socket (p.9)**
Use an S-VIDEO Cable to connect this socket to the S-VIDEO OUT Socket on video equipment.
High-quality images are obtained from the S-VIDEO IN Socket.
If the device you are using has an S-VIDEO OUT Socket, it is recommended that you use this socket.
- ⓻ **VIDEO IN Socket (p.9)**
Use a VIDEO Cable to connect this socket to the VIDEO OUT Socket on video equipment.

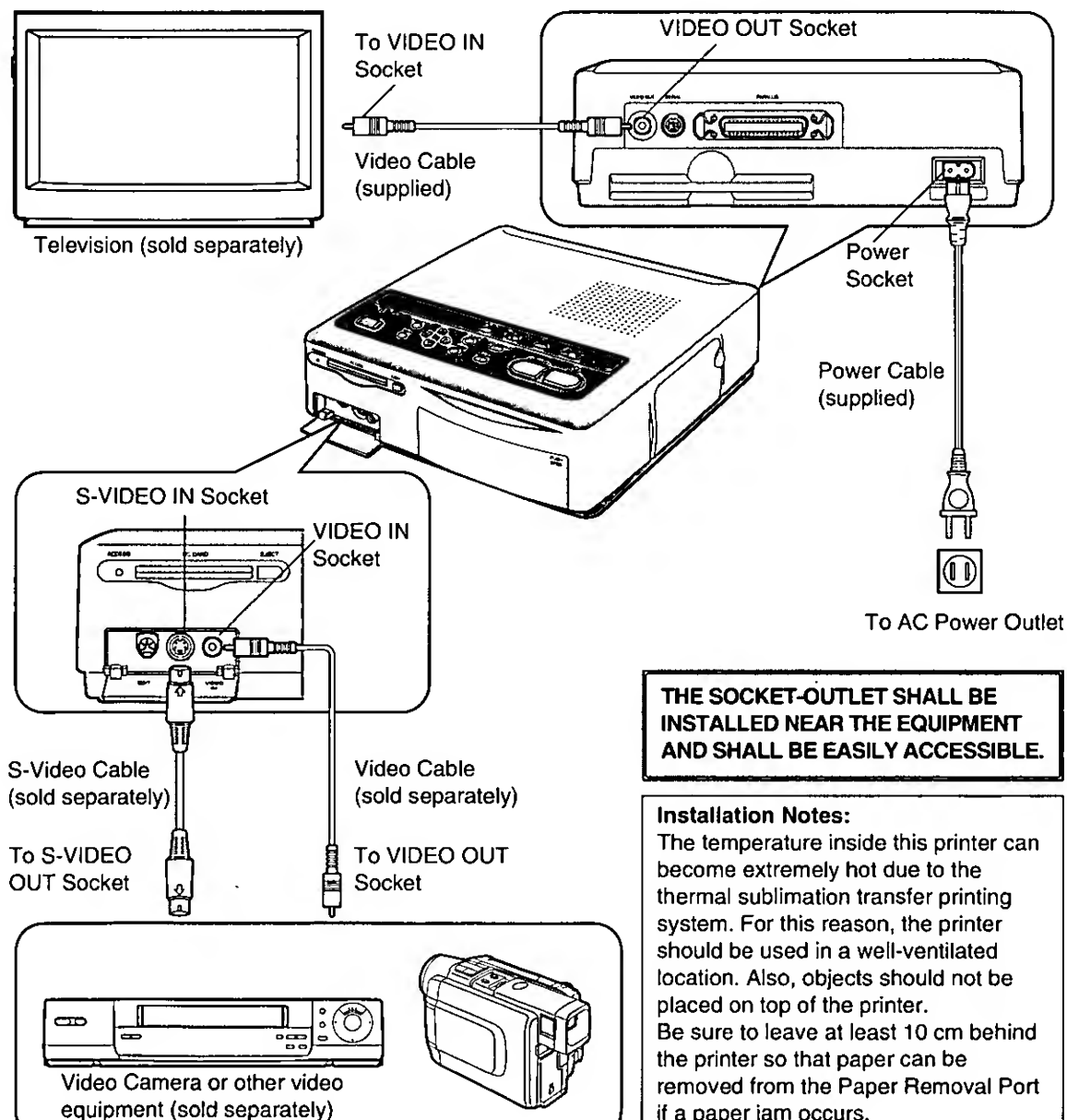


- 28 SERIAL Socket (p.46)**
Use this socket to connect the printer cable for Macintosh computers (available at computer stores).
- 29 PARALLEL Socket (p.46)**
Use this socket to connect the printer cable (available at computer stores). The PC should have a bidirectional parallel socket conforming to Centronics standards.
- 30 VIDEO OUT Socket (p.9)**
Use this socket to connect the cable from the VIDEO Socket (VIDEO IN Socket) on the television.
- 31 Paper Removal Port (p.15)**
Remove paper from here if a paper jam occurs.
- 32 Power Socket (p.9)**
Connect the supplied Power Cable here.

■ Connect with the S-Video Cable if the VCR or Camera has an S-VIDEO OUT socket.

- Connecting to a VCR with an S-VIDEO OUT socket will allow wide-screen images to be automatically printed out in wide dimensions. (When "AUTO" is set for "WIDE" in MENU Mode) (p.17)

- Connect using a Video Cable if the VCR or Camera has no S-VIDEO OUT socket.
- To listen to sound from the VCR or Video Camera, connect the audio output from the VCR or Video Camera directly to the television AUDIO IN socket.
- If different video sources are connected simultaneously to the S-VIDEO IN Socket and the VIDEO IN Socket, the video for the S-VIDEO IN Socket takes precedence.



THE SOCKET-OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AND SHALL BE EASILY ACCESSIBLE.

Installation Notes:

The temperature inside this printer can become extremely hot due to the thermal sublimation transfer printing system. For this reason, the printer should be used in a well-ventilated location. Also, objects should not be placed on top of the printer. Be sure to leave at least 10 cm behind the printer so that paper can be removed from the Paper Removal Port if a paper jam occurs.

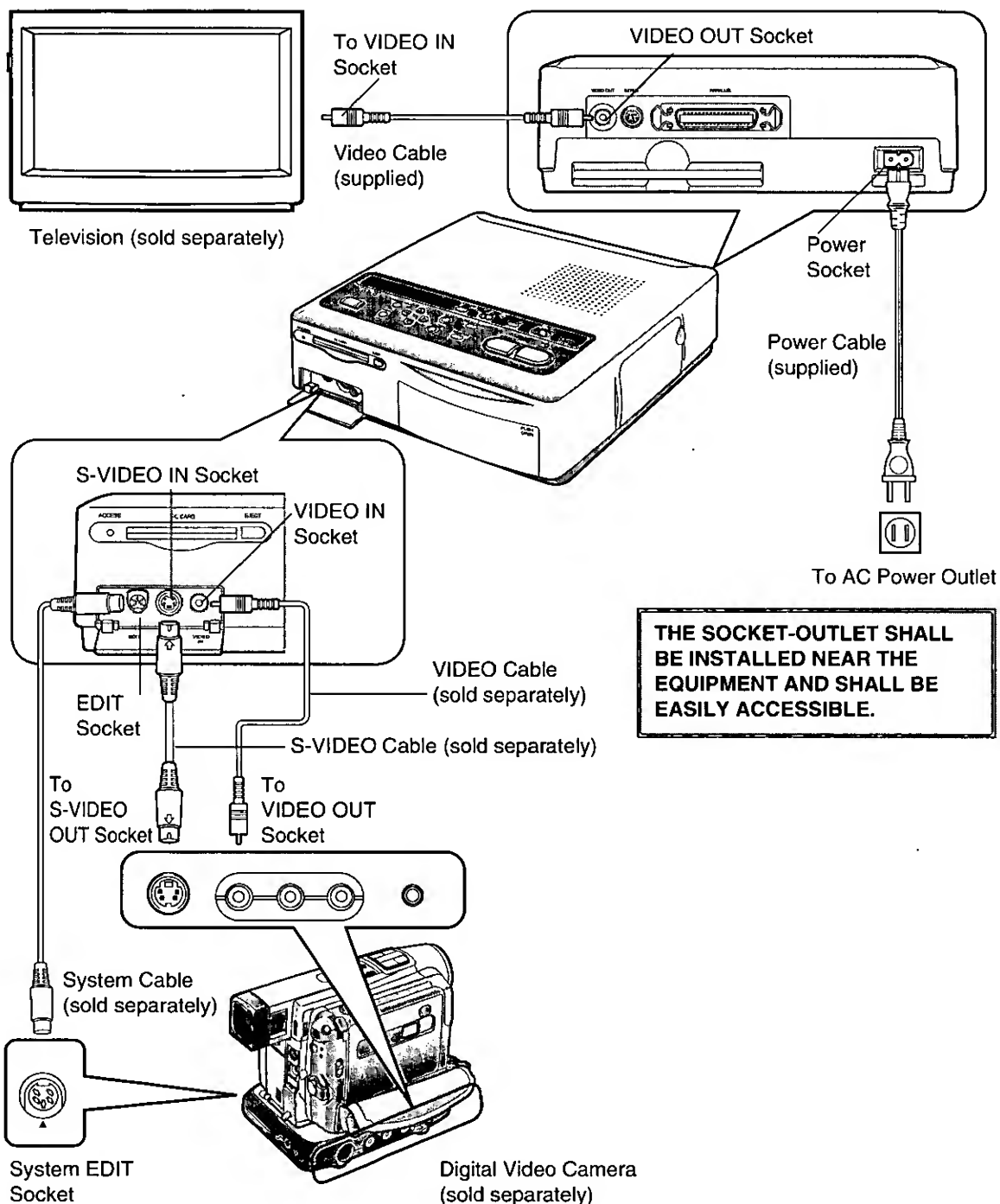
Automatic Printing for Panasonic Digital Video Camera

(Automatic printing requires a Digital Video Camera (sold separately) with a System (EDIT) Socket.)

Using a Video Cable (sold separately) or an S-Video Cable (sold separately), connect the Digital Video Camera to the Digital Photo Printer.

If the System Cable (sold separately) is also used to connect the System (EDIT) Socket on the Digital Video Camera to the EDIT Socket on the Digital Photo Printer, you can automatically search for and print still images that were recorded with the digital photo-shot function.

Important Caution : This Automatic Printing feature is not available for models PV-DV1000, PV-DV710, and PV-DV700.



Procedure

Digital Photo Printer:

1. Turn the Digital Photo Printer on.
2. Make the necessary settings on the Digital Photo Printer according to the input signal.

Digital Video Camera:

3. Set the POWER Switch to [ON] to turn the Digital Video Camera on.
4. Press the [VCR / CAMERA] Button so that the [VCR] Lamp lights.
5. Search for the first still picture from which you want to start printing with the Auto Print Function.
- If you want to print all still pictures recorded on the cassette, rewind the tape to its beginning.
6. Press the [MENU] Button.
7. Set [AUTOPRINT] on the Menu to [ON].
- Automatic Printing starts.


- If you want to stop the Automatic Printing in the middle, press the ■ (STOP) Button on the Digital Video Camera.

■Notes

- Auto Print may stop if the Digital Photo Printer's speed is slowed down due to its cooling mechanisms. In this event, perform the Auto Print operation through the Digital Video Camera again.
- If several photo-shots were recorded consecutively, some prints may be skipped during Auto Print.
- If the ink or paper is replaced while Auto Print is in progress, one image may be inadvertently printed twice.
- The Auto Print Function cannot be used to print multiple copies of the same image in succession.
- To stop Auto Print while it is in progress, press the ■ (STOP) Button on the Digital Video Camera. Pressing the CLEAR Button on the Digital Photo Printer will not stop Automatic Printing.

Paper That Can Be Used for Printing

The Digital Photo Printer can use the following three types of paper.

(Use Print Sets that either bear the  mark or have been designated by Panasonic as suitable for this Digital Photo Printer)

■Standard paper

The Print Set PV-MPS50 is required.

(Sold separately: Ink Cassette and paper [50 sheets])

- This paper can be used as a postcard if a postage stamp is affixed.
- Do not affix stamps or adhesive paper to the paper or print on it with a word processor before printing. The paper may become curled, or the stamp may come off, resulting in a paper jam or malfunction in the Photo Printer.
- Do not write on the paper before printing on it with the Photo Printer.
- When writing on a printed surface, use a permanent marker (oil-based). In this case, do not allow printed surfaces to come into contact with each other.
- Permanent markers, washable markers, pencils, and ballpoint pens can all be used to write on the back of the printed images. However, be careful not to apply too much pressure when writing on the back since this will leave marks on the printed surface.

■Adhesive paper

The Print Set PV-MPAS25 is required.

(Sold separately: Ink Cassette and adhesive paper

[25 sheets])

- Do not peel off the adhesive before printing. This can cause a paper jam or malfunction in the Photo Printer.
- When affixing the adhesive paper to another surface (paper, glass, plastic, metal, etc.), carefully clean the surface of all dirt and foreign matter.
- When cutting off adhesive paper after printing, use a "one-sheet cutter" (available at stores) to cut the adhesive paper with the backing paper still in place.

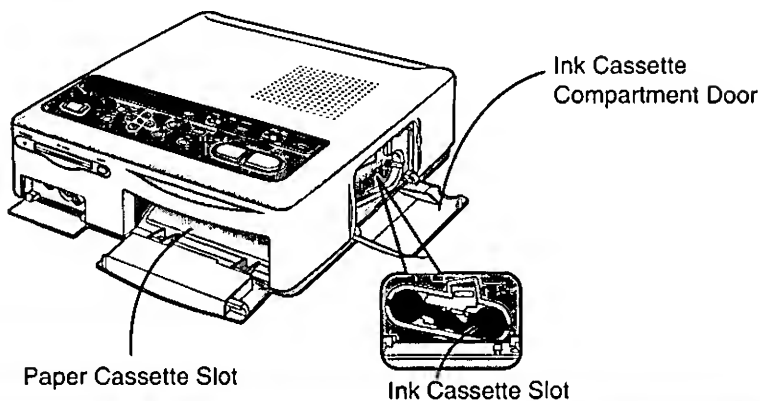
■16 Pre-Cut Adhesive paper

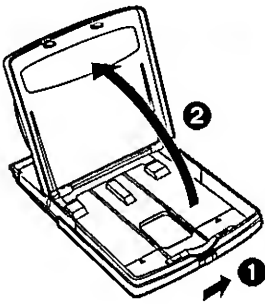
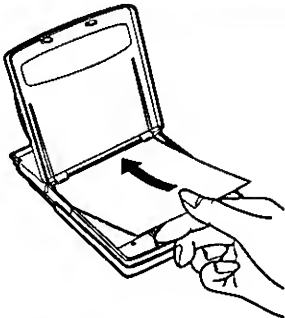
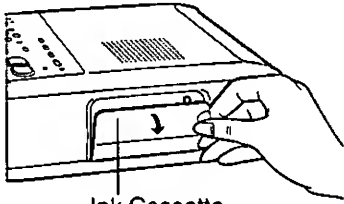
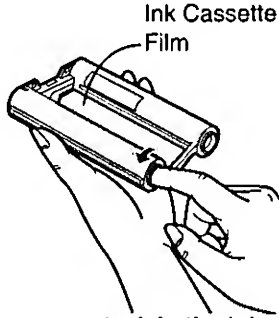
The Print Set PV-MPAS16 is required.

(Sold separately: Ink Cassette and 16 Pre-Cut Adhesive paper [25 sheets])

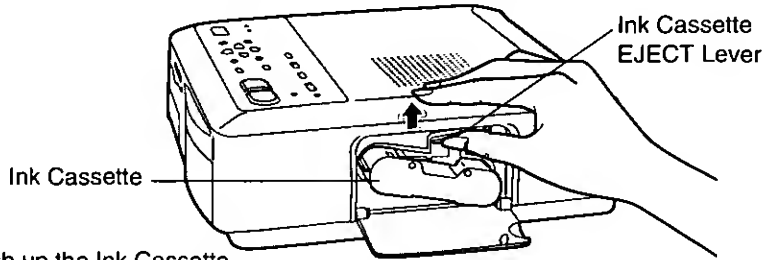
- Do not peel off the adhesive before printing. This can cause a paper jam or malfunction in the Photo Printer.
- When affixing the adhesive paper to another surface (paper, glass, plastic, metal, etc.), carefully clean the surface of all dirt and foreign matter.
- This paper cannot be used for wide-mode printing.

Inserting the Printing Paper / Inserting the Ink Cassette



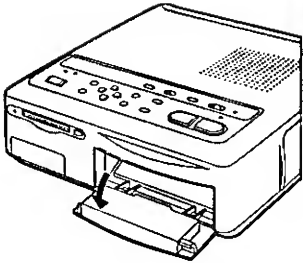
Title	Procedure	
Inserting the Printing Paper	<p>1</p>  <p>Open the cover of the Paper Cassette (supplied). ① Slide the switch, and ② Raise the cover.</p>	<p>2</p>  <p>Place the paper in the Paper Cassette with the blank side to be printed facing up. The Paper Cassette can hold up to 25 sheets. Tuck the paper under the two tabs.</p> <p>3 Close the cover.</p>
Inserting the Ink Cassette	<p>1</p>  <p>Open the Ink Cassette Compartment Door.</p>	<p>2</p>  <p>Take up any slack in the Ink Cassette Film.</p> <ul style="list-style-type: none"> • Insert a finger in a spool and turn it in the direction indicated by the arrow. • Ink Cassettes are included in the Print Sets (sold separately). (p.11)

Removing the Ink Cassette



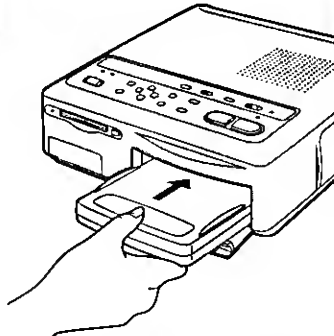
- Push up the Ink Cassette EJECT Lever, and then pull the Ink Cassette straight out.

4



Open the cover of the Paper Slot.
To open, press "PUSH OPEN" at the top right of the cover.

5

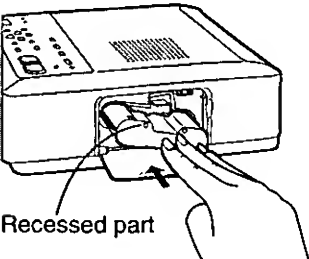


Push the Paper Cassette into the Photo Printer as far as it will go.

Remarks, etc.

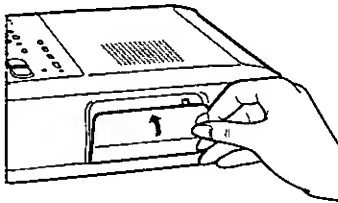
- Do not bend or fold the paper or place it in the cassette with the wrong side facing upward.
- Do not soil the printing side (blank side) of the paper.
- Fan the paper before placing it in the Paper Cassette.
- The front end of the Paper Cassette Slot becomes the left side of the image to be printed.
- Do not remove the Paper Cassette while printing is in progress.
- After printing, remove the Paper Cassette and close the cover of the Paper Cassette Slot.

3



With the recessed part facing upward, push the Ink Cassette into the Photo Printer as far as it will go.

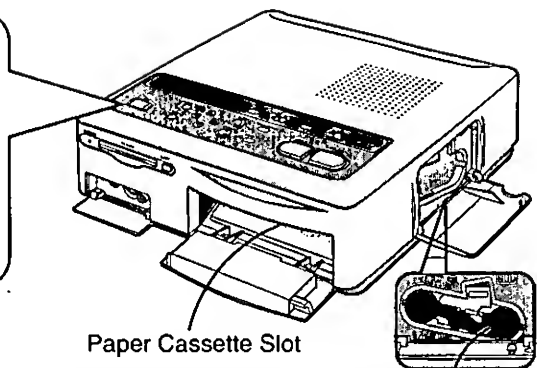
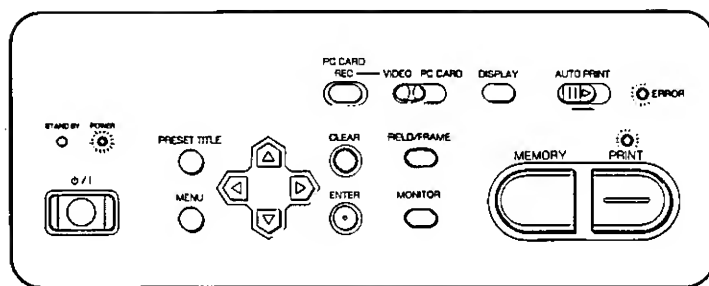
4



Close the Ink Cassette Compartment Door.
Check that the Ink Cassette has been inserted all the way before closing the Compartment Door.

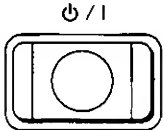
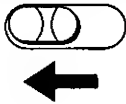

- Do not touch the ink film in the Ink Cassette, and do not try to pull it out of the cassette.
- Do not peel off the label on the Ink Cassette.
- The "ink film" refers to the wide tape that is inside the Ink Cassette.
- When all of the ink film in an Ink Cassette has been used up, replace the Ink Cassette with a new one. Used Ink Cassettes cannot be reused.
- For best printing results, use only the printing paper and Ink Cassette packaged together as a Print Set.

Printing from Video Input



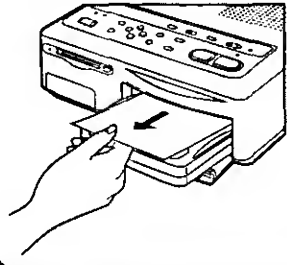
Paper Cassette Slot

Ink Cassette Slot

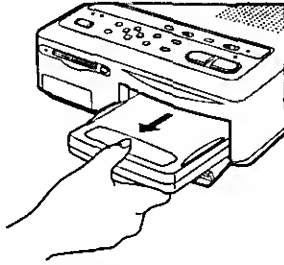
Title	Procedure	
<p>Printing from Video Input (Printing an image from the VIDEO IN or S-VIDEO IN Socket)</p> <ul style="list-style-type: none"> • Before printing, check that an Ink Cassette has been inserted in the Ink Cassette Compartment. • Check that paper has been placed in the Paper Cassette, and then start the printing procedure. 	<p>1</p>  <p>Press the P / I (Power) Button to turn the printer on.</p> <ul style="list-style-type: none"> • The POWER Lamp lights up. 	<p>2</p> <p>VIDEO PC CARD</p>  <p>Set the INPUT SELECT (VIDEO / PC CARD) Switch to "VIDEO".</p>
<p>While printing is in progress, the only button on the Photo Printer that functions is the CLEAR Button for canceling the printing of multiple sheets.</p>	<p>■Blur Reduction</p> <p>Use this button when the picture stored in memory is blurred because the subject is moving. "FIELD" appears on the screen when the FIELD/FRAME Button is pressed.</p>  <ul style="list-style-type: none"> • The television may make the picture stored in memory appear slightly blurry. However, this does not affect the printing. <p>■To Print the Same Image Again</p> <p>After printing is finished, press the MONITOR Button again so that the image displayed on the television screen is stored in the memory. Then, press the PRINT Button to print the same image again.</p> <p>■Printing Multiple Copies of the Same Image</p> <p>Set the number of prints on the MENU Screen (up to 10 sheets). (p.16)</p> <ul style="list-style-type: none"> • The remaining sheets to be printed are shown at the top right of the television screen. This number includes the sheet being printed. • To cancel continuous printing when two or more sheets remain, press the CLEAR Button. 	

After Printing

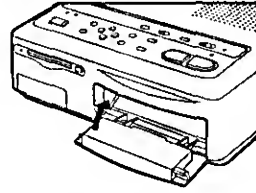
1. Remove the printed paper.



2. Take out the Paper Cassette.



3. Close the cover of the Paper Cassette slot.



4. Turn the printer off by pressing the **⏻ / I (Power) Button**.
• The **STAND BY** Lamp lights up.

3

MEMORY



While watching the television screen, press the **MEMORY** Button at the scene that you want to print.

- The **PRINT** Lamp lights up.
- To store a new scene in memory, press the **MONITOR** Button so that the **PRINT** Lamp turns off. Then, press the **MEMORY** Button again to store a new image in memory.

4

PRINT



Check that the **PRINT** Lamp on the Photo Printer is lit, and then press the **PRINT** Button.

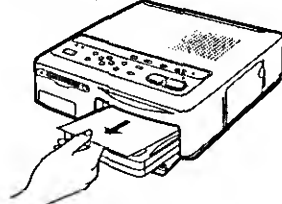
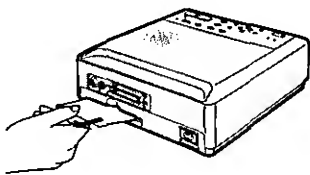
- Printing starts.
- During printing, the picture that is being input from the memory appears on the television screen.
- When printing is finished, the picture that is being input from the video source appears on the television screen again.

■ If a Paper Jam Occurs

A **"REMOVE JAMMED PAPER"** error message is displayed, and the **ERROR** Lamp flashes. When this happens, remove the paper where it has jammed (① or ② in the figure above). If the paper cannot be removed, turn off the printer. Then, turn the printer on again and remove the paper from either ① or ②.

① Rear Paper Removal Port

② Print Exit (above the Paper Cassette)

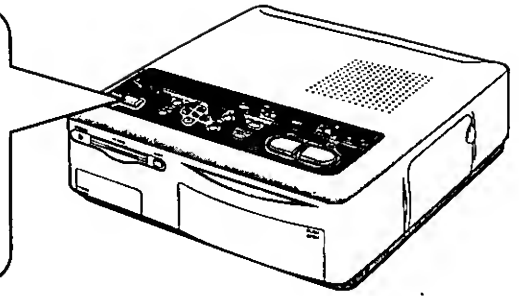
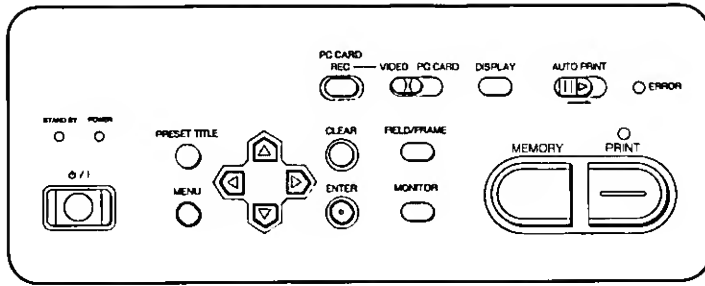






- If the Paper Cassette is removed while printing is in progress, paper will become jammed in the Print Exit (above the Paper Cassette) and be unable to be pulled out. Insert the Paper Cassette and turn the printer on again to discharge the paper.

Remarks, etc.

- When printing starts, the "—" display shown at the top right of the screen changes to "☆☆—".
- "☆☆—": Printing in progress
- "☆☆—": Printing in progress
- "☆☆☆": Printing is completed when the ☆ mark flashes and then lights up.
(The ☆ mark indicates the printing progress.)
- Do not pull the paper while it is moving during the printing operation.
- Do not remove the Paper Cassette while printing is in progress.
- Do not take out the Ink Cassette while printing is in progress.
- If there is no paper in the Paper Cassette or if the paper is not inserted properly, the **"SET PAPER AND PUSH [PRINT]"** message may appear after the **PRINT** Button is pressed (after approx. 25 seconds). When this happens, reinsert the paper correctly.
- Printing may take more time for continuous printing of two or more sheets or when printing at high or low temperatures. Also, if the Photo Printer becomes hot, the edges of the printed images may be slightly discolored.
- Please note that if the paper is bent or folded, the prints may fall from the Print Exit (above the Paper Cassette).
- To prevent paper jams, do not allow more than 10 sheets of paper to accumulate at the Print Exit.

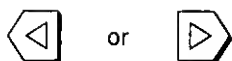
Using MENU Mode



Title	Procedure	
<p>Using MENU Mode</p> <p>The settings for the functions in the Photo Printer are made at the MENU Screen.</p>	<p>1</p> <p>MENU</p>  <p>Press the MENU Button.</p> <ul style="list-style-type: none"> The MENU Screen is displayed on the television screen. 	<p>2</p>  or  <p>Use the ▲ and ▼ Buttons to select the desired menu.</p> <ul style="list-style-type: none"> The  mark indicates the selected item.
<p>■ Menu Description</p>	<p>① PRINT: Use the ◀ and ▶ Buttons to set the number of prints (from 1 to 10) desired.</p> <p>② FORMAT: If [SET] is selected, use the ▲ and ▼ Buttons to select each print function. (p.20 - 25)</p> <p>③ PICTURE: If [SET] is selected, you can adjust the picture quality. (p.18)</p> <p>④ FRAME: If [SET] is selected, you can make your own trimming frame. (p.42)</p> <p>⑤ TITLE: If [SET] is selected, you can make your own titles. (p.44)</p> <p>⑥ OSD (On Screen Display): Use the ◀ and ▶ Buttons to select [ON] or [OFF] for the screen display. •Error messages, menus, and the preset title menu are still displayed even when [OFF] is selected for OSD. (The setting for OSD is still stored even when the INPUT SELECT Switch is set to "PC CARD").</p>	

	MENU		
1	PRINT	: 1	
2	FORMAT	: [STD]	SET
3	PICTURE	: [STD]	SET
4	FRAME	: [OFF]	SET
5	TITLE	: [OFF]	SET
6	OSD	: [ON]	OFF
7	WIDE	: [AUTO] ON	OFF
	[◀▶]CHANGE		
	[◀▶]SELECT [ENTER]END		

3



or

Use the ◀ and ▶ Buttons to select the desired setting.

- The selected setting is indicated by brackets [].

4

ENTER



Press the ENTER Button to complete the setting.

- The MENU Screen disappears from the television screen.

Remarks, etc.

- The ◀ ▶ ▲ ▼ Buttons, ENTER Button, and ⏻/I (Power) Button are the only buttons that function while the MENU Screen is displayed.
- Once you set "PICTURE," [ADJ] is displayed on the MENU Screen. The previous settings are maintained in memory until you select [SET] to implement the new settings.
- Once you set "FRAME" or "TITLE," [ON] is displayed on the MENU Screen. The previous settings are maintained in memory until you select [SET] to implement the new settings.
- The stored settings are erased when the power cable is unplugged.
- If the letters are blurred and difficult to read when the MENU Screen is displayed, go to the MEMORY Screen and then return to the MENU Screen to make the settings.

- ⑦WIDE:
- [AUTO] The wide video signal from the S-VIDEO IN socket is automatically identified and printed in wide dimensions (62×107 mm).
- [ON] All pictures are printed in wide dimensions.
- [OFF] All images, including wide images, are printed in normal dimensions.

- When normal-sized images are printed as wide images, the printed picture is stretched horizontally.

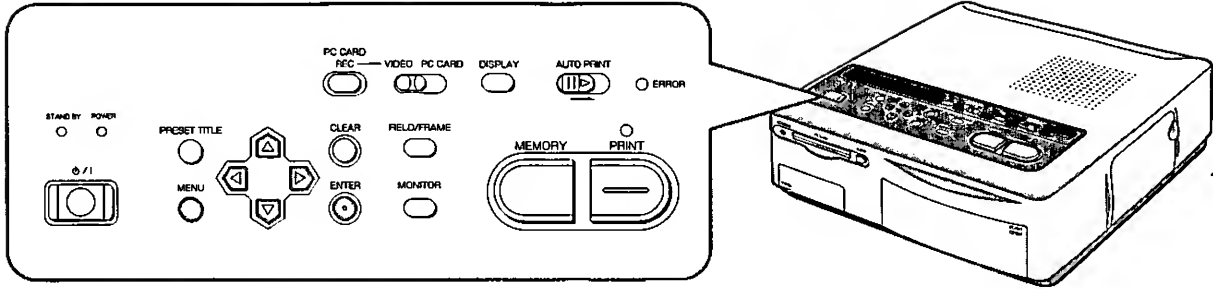







- When wide images are printed as normal-sized images, the printed picture is stretched vertically.



- Wide images can be automatically identified only when the Photo Printer and the video device are connected with an S-Video cable.

For Optimum Printing Results (PICTURE)



Title	Procedure																																																										
<p>For Optimum Printing Results (PICTURE)</p> <p>Although the picture quality of an image that you want to print can be adjusted before storing the image in memory, for optimum results we recommend that you adjust the picture quality of the image after you have stored it in memory.</p>	<div><div>1</div><div>MENU</div><div></div><div>Press the MENU Button.</div><div><table><tr><th colspan="3">MENU</th></tr><tr><td>PRINT</td><td>: 1</td><td></td></tr><tr><td>FORMAT</td><td>: [STD]</td><td>SET</td></tr><tr><td>PICTURE</td><td>: [STD]</td><td>SET</td></tr><tr><td>FRAME</td><td>: [OFF]</td><td>SET</td></tr><tr><td>TITLE</td><td>: [OFF]</td><td>SET</td></tr><tr><td>OSD</td><td>: [ON]</td><td>OFF</td></tr><tr><td>WIDE</td><td>: [AUTO]</td><td>ON OFF</td></tr><tr><td colspan="3">[< >]CHANGE</td></tr><tr><td colspan="3">[< >]SELECT [ENTER]END</td></tr></table></div></div>	MENU			PRINT	: 1		FORMAT	: [STD]	SET	PICTURE	: [STD]	SET	FRAME	: [OFF]	SET	TITLE	: [OFF]	SET	OSD	: [ON]	OFF	WIDE	: [AUTO]	ON OFF	[< >]CHANGE			[< >]SELECT [ENTER]END			<div><div>2</div><div></div><div>Use the ▼ Button to select "PICTURE".</div><div><table><tr><th colspan="3">MENU</th></tr><tr><td>PRINT</td><td>: 1</td><td></td></tr><tr><td>FORMAT</td><td>: [STD]</td><td>SET</td></tr><tr><td>PICTURE</td><td>: [STD]</td><td>SET</td></tr><tr><td>FRAME</td><td>: [OFF]</td><td>SET</td></tr><tr><td>TITLE</td><td>: [OFF]</td><td>SET</td></tr><tr><td>OSD</td><td>: [ON]</td><td>OFF</td></tr><tr><td>WIDE</td><td>: [AUTO]</td><td>ON OFF</td></tr><tr><td colspan="3">[< >]SELECT [ENTER]END</td></tr></table></div></div>	MENU			PRINT	: 1		FORMAT	: [STD]	SET	PICTURE	: [STD]	SET	FRAME	: [OFF]	SET	TITLE	: [OFF]	SET	OSD	: [ON]	OFF	WIDE	: [AUTO]	ON OFF	[< >]SELECT [ENTER]END		
MENU																																																											
PRINT	: 1																																																										
FORMAT	: [STD]	SET																																																									
PICTURE	: [STD]	SET																																																									
FRAME	: [OFF]	SET																																																									
TITLE	: [OFF]	SET																																																									
OSD	: [ON]	OFF																																																									
WIDE	: [AUTO]	ON OFF																																																									
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OSD	: [ON]	OFF																																																									
WIDE	: [AUTO]	ON OFF																																																									
[< >]SELECT [ENTER]END																																																											
	<div><div>5</div><div> or </div><div>Use the ◀ and ▶ Buttons to adjust the level.</div><div><table><tr><td>COLOR</td><td>+2</td></tr><tr><td colspan="2">- - - - - +</td></tr><tr><td colspan="2">[< >]ADJUST</td></tr><tr><td colspan="2">[< >]SELECT [ENTER]END</td></tr></table></div></div>	COLOR	+2	- - - - - +		[< >]ADJUST		[< >]SELECT [ENTER]END		<div><div>6</div><div></div><div>Press the ENTER Button.</div></div>																																																	
COLOR	+2																																																										
- - - - - +																																																											
[< >]ADJUST																																																											
[< >]SELECT [ENTER]END																																																											

Picture Quality Adjustment Procedure

1. Set "PICTURE" to [STD] in MENU mode, and then print an image with contrasting bright and dark areas.
2. In television picture quality adjustment, adjust the television screen to nearly the same color as the printed picture.
3. At "PICTURE" in MENU mode, adjust the television screen to the desired color balance.
Printing after making these adjustments will produce a print with almost exactly the same colors as the screen.

3



Use the ► Button to select [SET].

MENU			
PRINT	: 1		
FORMAT	: [STD]	SET	
[G] PICTURE	: STD	[SET]	
FRAME	: [OFF]	SET	
TITLE	: [OFF]	SET	
OSD	: [ON]	OFF	
WIDE	: [AUTO]	ON	OFF
[◀▶]SELECT [ENTER]END			

4



or



Use the ▲ and ▼ Buttons to select the picture quality item that you want to adjust.

- See the adjustment items below.

COLOR	0
-----+-----	
[◀▶]ADJUST	
[◀▶]SELECT	[ENTER]END

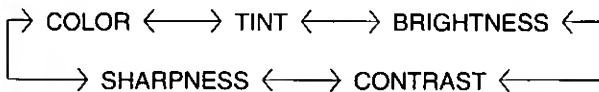
Remarks, etc.

- For PC Card input, follow the same procedure shown above.
- If it is necessary to re-adjust the picture quality, start over from Step 1.
- The picture will not be displayed in black and white even if COLOR is set to -9.
- Adjusting SHARPNESS has no effect on television picture quality.
- Images are stored in the PC Card without the setting adjustments made to the picture quality.

When using video input, one of the most important factors in printing images of high quality is skillful video camera work. When printing, it is recommended that you use an S-VIDEO IN Socket for best results. When shooting a scene from a Video Camera, keep the following points in mind.

- If at all possible, shoot with the light source at your back.
- When shooting a scene outdoors that includes motion, either put the Video Camera into "sports mode" or, if the camera is equipped with an electronic shutter function, set it to about 1/500. Doing so will allow you to print images without blurring.
- When shooting indoors, make sure that there is enough illumination.

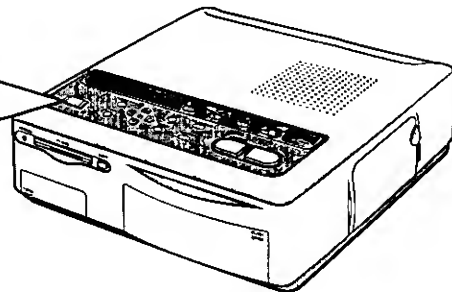
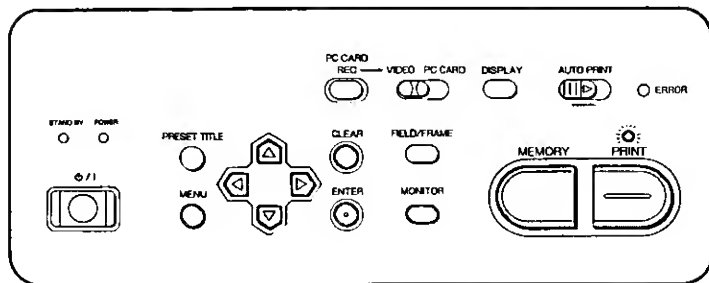
Picture Quality Adjustment Items



The adjustments shown below change in the following order.

- COLOR:** This setting lets you adjust to the desired colour intensity.
- TINT:** This setting lets you reproduce colors with the correct balance.
- BRIGHTNESS:** This setting lets dark parts become more visible.
- CONTRAST:** This setting lets you adjust the difference between the light and dark parts of the picture.
- SHARPNESS:** This setting lets you adjust the contours.
- The COLOR, TINT, BRIGHTNESS, and CONTRAST settings can be adjusted from -9 to +9 using the ◀ and ▶ Buttons.
 - The level of SHARPNESS can be set to L (Low), M (Medium), or H (High) using the ◀ and ▶ Buttons.

Printing a Series of Different Pictures on the Same Print (ALBUM)



Title

Procedure

Printing a Series of Different Pictures on the Same Print (ALBUM)



- This printing function allows you to divide the screen into 4, 9, or 16 mini-frames containing different pictures, and then print them all together on the same print.
- This feature is useful for printing a variety of scenes from a vacation on a single print.
- When using the 16 Pre-Cut Adhesive paper PV-MPAS16 (sold separately), select ALBUM: [16] in Step 4.

1

MENU



Press the MENU Button, and then use the ▼ Button to select "FORMAT".

MENU			
PRINT	: 1		
FORMAT	: [STD]		[SET]
PICTURE	: [STD]		SET
FRAME	: [OFF]		SET
TITLE	: [OFF]		SET
OSD	: [ON]	OFF	OFF
WIDE	: [AUTO]	ON	OFF
[◀▶]SELECT [ENTER]END			

2



Use the ► Button to select [SET].

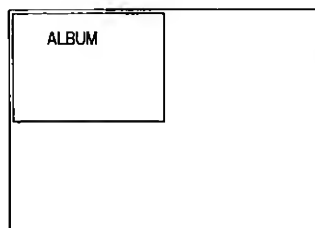
MENU			
PRINT	: 1		
FORMAT	: STD		[SET]
PICTURE	: [STD]		SET
FRAME	: [OFF]		SET
TITLE	: [OFF]		SET
OSD	: [ON]	OFF	OFF
WIDE	: [AUTO]	ON	OFF
[◀▶]SELECT [ENTER]END			

5

ENTER



Press the ENTER Button.



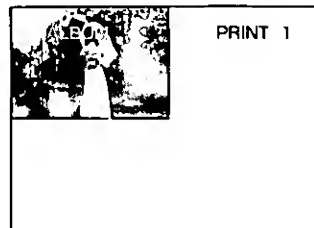
6

MEMORY



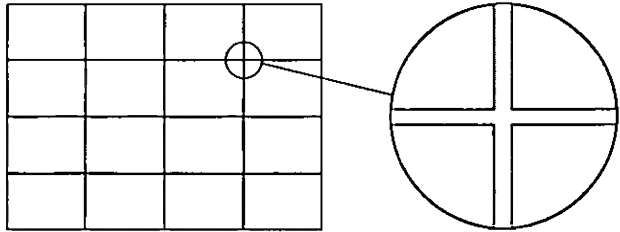
Press the MEMORY Button.

- After the image stored in memory is displayed for about one second, the display returns to the input screen.



Printing for 16 Mini-frame Pictures

16 mini-frame pictures are printed separated by white lines.
(These lines are also displayed on the television screen.)



3



Use the ▼ Button to select "ALBUM".

FORMAT	
STD	
ALBUM	: [4] 9 16
MULTI	
STROBE	

[◀ ▶] SELECT [ENTER] END

4



or



Use the ◀ and ▶ Buttons to select the desired number of mini-frames.

FORMAT	
STD	
ALBUM	: [4] 9 16
MULTI	
STROBE	

[◀ ▶] SELECT [ENTER] END

7

Check that the PRINT Lamp is lit up.

- If the entire ALBUM Screen is not stored in memory, press the MONITOR Button to light up the PRINT Lamp.



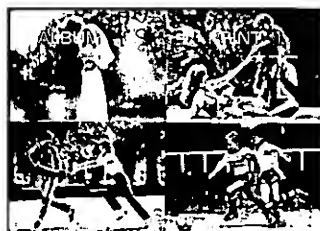
8

PRINT



Then press the PRINT Button.

- Printing starts.



Remarks, etc.

■ To Erase Stored Pictures

Press the CLEAR Button when the PRINT Lamp is lit. One frame is erased each time the CLEAR Button is pressed.

(To store new pictures to replace the erased pictures, press the MONITOR Button so that the PRINT Lamp turns off, and then press the MEMORY Button.)

■ Storing Pictures Again after All the Pictures Are Stored

Press the MONITOR Button so that the PRINT Lamp turns off, and then press the MEMORY Button. (See Step 6 on the previous page.)

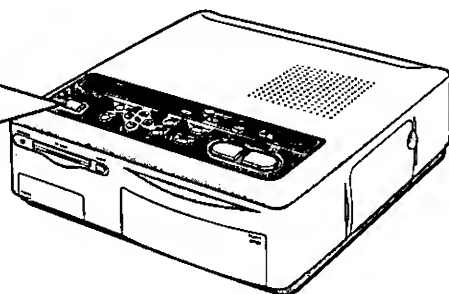
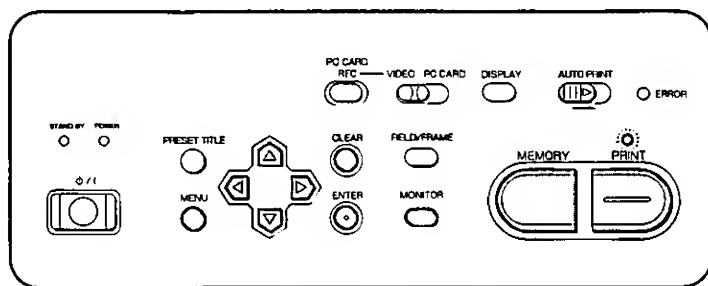
■ To Abort the Setting Process

Press the CLEAR Button twice when the PRINT Lamp is turned off.

Hints for Use

- The PRINT Lamp lights up and turns off each time the MONITOR Button is pressed.
- If you press the MONITOR Button again after printing is complete, the display returns to the MEMORY Screen, allowing you to print the same pictures again.
- To allow printing without the entire ALBUM Screen stored in memory, press the MONITOR Button to light up the PRINT Lamp. The ALBUM Screen will be printed with white spaces where no image was saved. (In this case, the pictures are still stored in memory starting from the upper left corner. There is no editing operation that makes it possible to print images interspersed with blank (white) images.)

Printing the Same Picture Repeatedly on the Same Print (MULTI FRAME)



Printing the Same Picture Repeatedly on the Same Print (MULTI FRAME)



- This feature allows you to divide the paper into 4, 9, or 16 mini-frames, and then print the same stored image, reduced in size, in each mini-frame.
- This feature is useful for printing head portraits for business cards when using the Print Set for adhesive paper.
- When using the 16 Pre-Cut Adhesive paper PV-MPAS16 (sold separately), select MULTI: [16] in Step 4.

Title

Procedure

1

MENU



Press the MENU Button, and then use the ▼ Button to select "FORMAT".

MENU			
PRINT	: 1		
FORMAT	: [STD]		[SET]
PICTURE	: [STD]		SET
FRAME	: [OFF]		SET
TITLE	: [OFF]		SET
OSD	: [ON]		OFF
WIDE	: [AUTO]	ON	OFF
[◀▶]SELECT [ENTER]END			

2



Use the ► Button to select [SET].

MENU			
PRINT	: 1		
FORMAT	: STD		[SET]
PICTURE	: [STD]		SET
FRAME	: [OFF]		SET
TITLE	: [OFF]		SET
OSD	: [ON]		OFF
WIDE	: [AUTO]	ON	OFF
[◀▶]SELECT [ENTER]END			

5

ENTER



Press the ENTER Button.

MULTI	
FRAME	

6

MEMORY



Press the MEMORY Button.



Remarks, etc.

■To Erase Stored Pictures

Press the MONITOR Button when the PRINT Lamp is lit.

(To store new pictures to replace the erased pictures, press the MONITOR Button so that the PRINT Lamp turns off, and then press the MEMORY Button.)

■To Abort the Setting Process

Press the CLEAR Button once when the PRINT Lamp is turned off.

- The PRINT Lamp lights up and turns off each time the MONITOR Button is pressed.
- If you press the MONITOR Button again after printing is complete, the display returns to the MEMORY Screen, allowing you to print the same pictures again.
- It is also possible to store the image that you want to print in memory first, and then select the "MULTI" printing settings on the MENU Screen.

3



Use the ▼ Button to select "MULTI".

FORMAT	
STD	
ALBUM	
[MULTI] : [4] [9] [16]	
STROBE	
[◀▶]SELECT	[ENTER]END

4



or



Use the ◀ and ▶ Buttons to select the desired number of mini-frames.

FORMAT	
STD	
ALBUM	
[MULTI] : [4] [9] [16]	
STROBE	
[◀▶]SELECT	[ENTER]END

7

PRINT

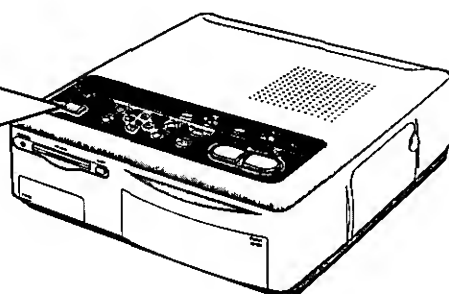
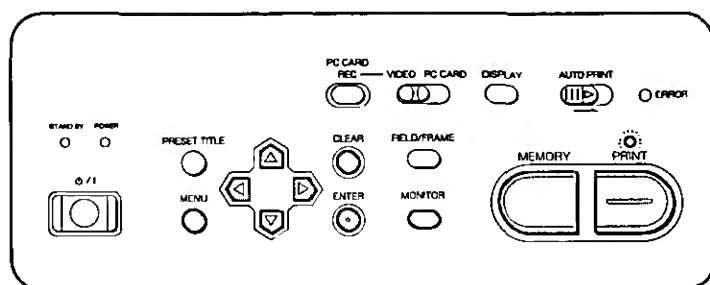


Press the PRINT Button.

- Printing starts.



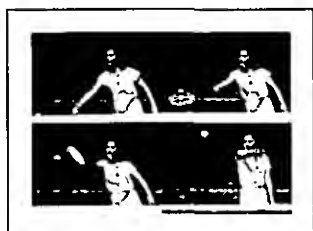
Printing a Sequence of Pictures on the Same Print (STROBE)



Title

Procedure

Printing a Sequence of Pictures on the Same Print (STROBE)



This feature allows the screen to be divided into 4, 9, or 16 mini-frames, allowing you to print a series of freeze-frames on a single sheet.

This feature is useful when studying, for instance, a golfer's swing or a tennis player's shot.

- One of three strobe speeds can be selected. The memory storage time is determined by the MODE and SPEED settings.

	Normal	Swing
L	3 seconds	2 seconds
M	2 seconds	1.8 seconds
H	1 second	1.4 seconds

1

MENU



Press the MENU Button, and then use the ▼ Button to select "FORMAT".

MENU		
PRINT	: 1	
FORMAT	: [STD]	SET
PICTURE	: [STD]	SET
FRAME	: [OFF]	SET
TITLE	: [OFF]	SET
OSD	: [ON]	OFF
WIDE	: [AUTO]	ON OFF
[◀▶]SELECT [ENTER]END		

2



Use the ► Button to select [SET].

MENU		
PRINT	: 1	
FORMAT	: [STD]	[SET]
PICTURE	: [STD]	SET
FRAME	: [OFF]	SET
TITLE	: [OFF]	SET
OSD	: [ON]	OFF
WIDE	: [AUTO]	ON OFF
[◀▶]SELECT [ENTER]END		

5



Use the ▼ Button to select "SPEED", and then use the ◀ and ▶ Button to select the speed.

STD	ALBUM	MULTI	
STROBE	: [4]	9	16
MODE	: [NORM]		SWING
SPEED	: [L]	[M]	H
[◀▶]SELECT [ENTER]END			

6

ENTER

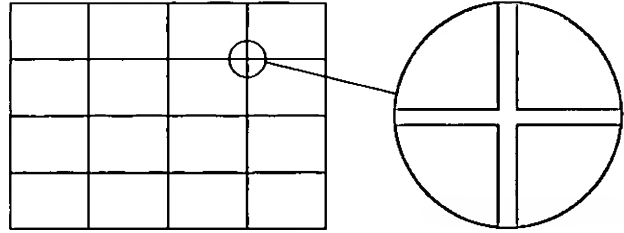


Press the ENTER Button.

STROBE	
--------	--

Printing for 16 Mini-frame Pictures

16 mini-frame pictures are printed separated by white lines.
(These lines are also displayed on the television screen.)



Remarks, etc.

■To Erase Stored Pictures

Press the CLEAR Button when the PRINT Lamp is lit. One frame is erased each time the CLEAR Button is pressed.

(To store new pictures to replace the erased pictures, press the MONITOR Button so that the PRINT Lamp turns off, and then press the MEMORY Button.)

■To Resume Storing Pictures Again

Press the MONITOR Button so that the PRINT Lamp turns off, and then press the MEMORY Button. (See Step 7 on the previous page.)

■To Abort the Setting Process

Press the CLEAR Button twice when the PRINT Lamp is turned off.

- The PRINT Lamp lights up and turns off each time the MONITOR Button is pressed.

- If you press the MONITOR Button again after printing is complete, the display returns to the MEMORY Screen, allowing you to print the same pictures again.

■When to Use the Two Strobe Modes

NORM (Normal):

Use this mode to store the screen in memory at uniform intervals.

SWING:

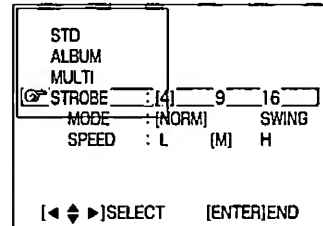
Use this mode to store the screen in memory at long intervals during the first part of the sampling period, then at shorter intervals during the middle part of the sampling period, and then at longer intervals again.

This mode is suitable for printing tennis and golf swings.

3



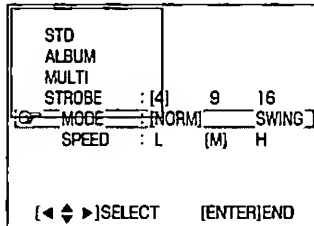
Use the ▼ Button to select "STROBE", and then use the ◀ and ▶ Button to select the number of mini-frames.



4



Use the ▼ Button to select "MODE", and then use the ◀ and ▶ Button to select the mode.



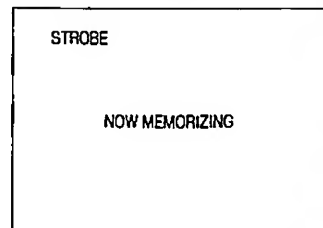
7

MEMORY



Press the MEMORY Button where you want the desired freeze-frames to start.

- The screen goes blank while these frames are being stored in memory.



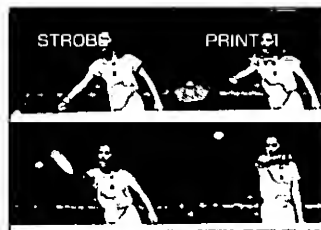
8

PRINT

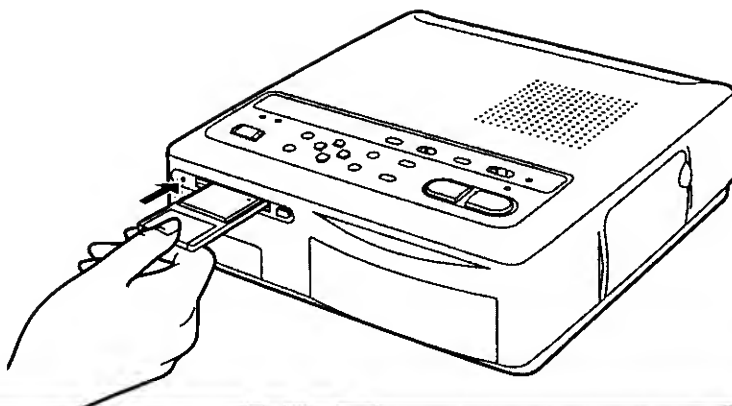


Press the PRINT Button.

- Printing starts.



Inserting a PC Card



Title

Procedure

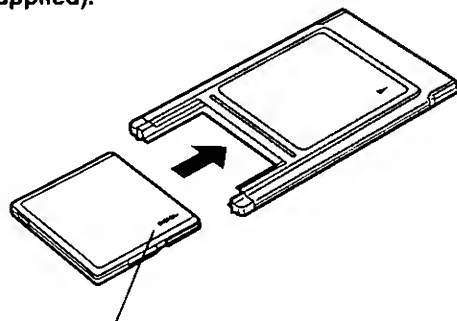
Inserting a PC Card

- This feature allows you to insert a PC Card, CF Card, or Smart Media into the PC Card Slot, and then print images from the card.
- The PC Card can be inserted into the PC Card Slot without any adaptors. CF Cards and Smart Media require adaptors.

■ Using a CF Card

1

Attach the CF Card containing image data to a PC Card Adapter (supplied).

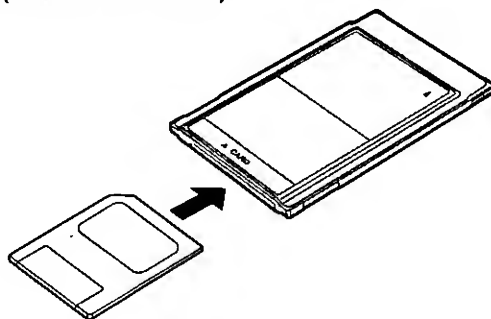


Insert the CF Card in the direction of the ▲ mark as shown in the figure. Insert the CF Card all the way into the PC Card Adapter.

■ Using Smart Media

1

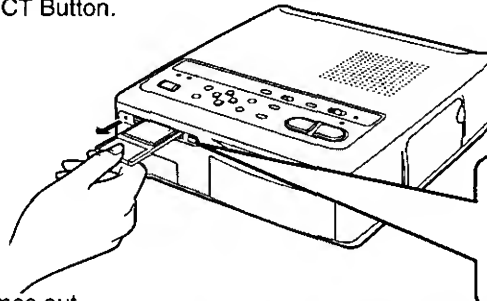
Attach the Smart Media containing image data to a PC Card Adapter (available at stores).



Follow the adapter instructions for attaching the Smart Media.

Removing the PC Card

Press the EJECT Button.

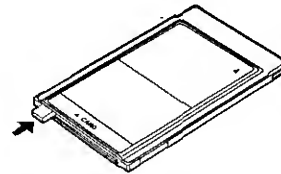


EJECT

• The card comes out.

Remarks, etc.

- Be careful not to insert the card in the wrong direction.
- PC Card Adaptors include a CF Card type (supplied) and Smart Media type (available at stores). Choose the proper one for the card you are using.
- The Smart Media is removed from the adaptor by pressing the button on the adaptor.



- Do not remove the Smart Media while it is still inserted into the PC Card Slot.

Compatibility of Cards from Digital Still Cameras with this Digital Photo Printer

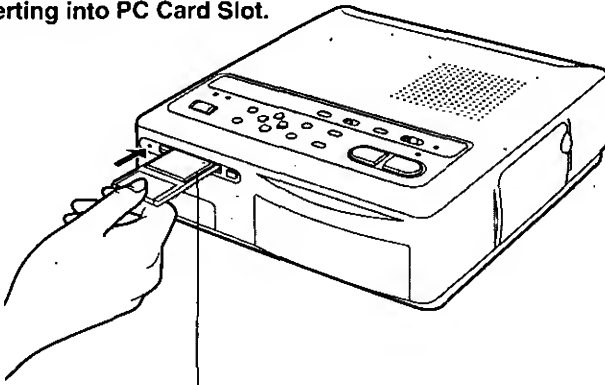
Cards with recorded images from the following Digital Still Cameras (in no particular order) can be printed with this Digital Photo Printer. (As of December 1997)

- NV-DCF1, PV-DC1080 (Panasonic)

PC Card Input

2

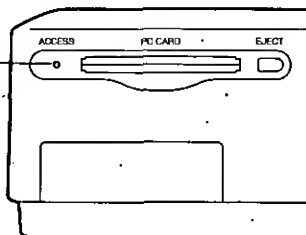
Inserting into PC Card Slot.



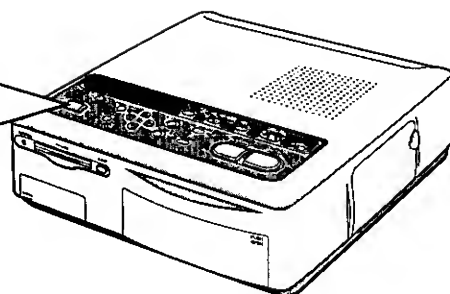
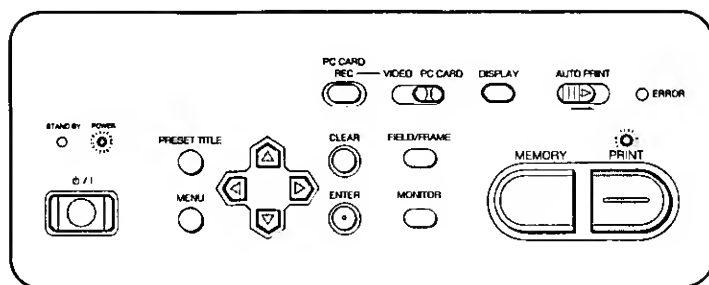
Insert the card in the direction of the ▲ mark as shown in the figure. Insert the card all the way into the PC Card Slot.

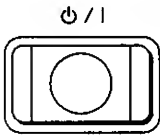
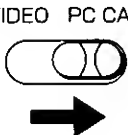
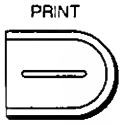


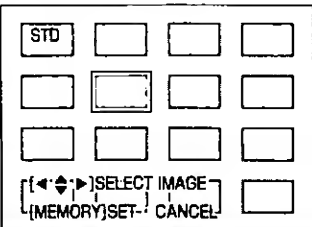
Never pull out or insert the card while the ACCESS Lamp on the front of the Photo Printer is lit up. This could damage the format of the card and make it unusable.

ACCESS Lamp



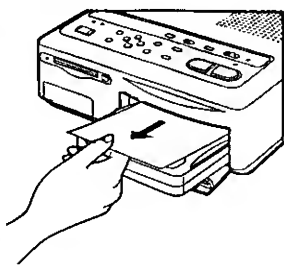
Printing from a PC Card



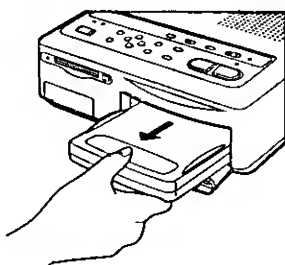
Title	Procedure	
<p>Printing from a PC Card (Printing images from a PC Card)</p> <ul style="list-style-type: none"> •The images stored in the PC Card are displayed as an Index (16 images per screen). This makes it easy to select the image to be printed. •Insert the PC Card into the Digital Photo Printer before starting the procedure. •Before printing, check that an Ink Cassette has been inserted into the Ink Cassette Compartment. •Check that paper has been placed in the Paper Cassette, and then start the printing procedure. 	<p>1</p>  <p>Press the ⏻ / I (Power) Button to turn the printer on. •The POWER Lamp lights up.</p>	<p>2</p>  <p>Set the INPUT SELECT (VIDEO / PC CARD) Switch to "PC CARD". •The ACCESS Lamp lights up, and the data in the card is read. •The images stored in the card are shown on an Index Display (16 images per screen).</p>
<p>None of the buttons on the Photo Printer function while printing is in progress.</p>	<p>4</p>  <p>Press the PRINT Button. •The PRINT Lamp flashes when printing starts. •When printing is finished, a Single-image Display is shown on the screen.</p> 	<p>5</p>  <p>Press the DISPLAY Button to return to the Index.</p> 

After Printing

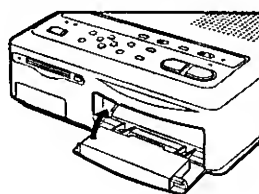
1. Remove the printed paper.




2. Take out the Paper Cassette.



3. Close the cover of the Paper Cassette Slot.



4. Turn the printer off by pressing the  / I (Power) Button.

• The STAND BY Lamp lights up.

Remarks, etc.

• Some images stored in the PC Card may be output to the television screen at a slow rate depending on the image.

One image takes about 5 to 30 seconds to be output to the screen. (An Index Display takes about 5 to 30 seconds × 16 images.)

Also, when the screen switching button is used to change between the Single-image Display and the Index Display, about 5 to 30 seconds are required for each image to be output.

The menu operations do not function when the picture image is being output.

• If the image is not displayed properly, remove the card and insert it, and then try to display the image again.

• When printing starts, the "—" display shown at the top right of the screen changes to "☆—".

"☆—": Printing in progress

"☆☆—": Printing in progress

"☆☆☆": Printing is completed when the ☆ mark flashes and then lights up.

(The ☆ mark indicates the printing progress.)

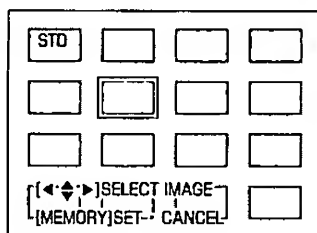
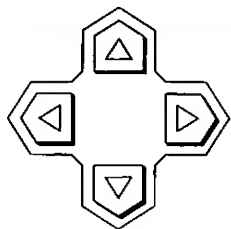
• Do not pull the paper while it is moving during the printing operation.

• Do not remove the Paper Cassette while printing is in progress.

• Do not take out the Ink Cassette while printing is in progress.

• To prevent paper jams, do not allow more than 10 sheets of paper to accumulate at the Print Exit.

3



Use the ◀, ▶, ▲, and ▼ Buttons to select the image to be printed.

- The green frame moves each time one of these buttons is pressed.
- When more than 16 images are recorded, you can go to the next Index Display by pressing the ▼ and ▶ Buttons several times.
- The printer does not function while the images are being displayed.

■ Switching the Television Picture from Index Display to Single-image Display and Printing

1. Press the DISPLAY Button.

DISPLAY



- The DISPLAY Button switches between Single-image Display and Index Display.

2. Use the ◀ and ▶ Buttons to select the image to be printed.



or



- The PRINT Lamp lights up.

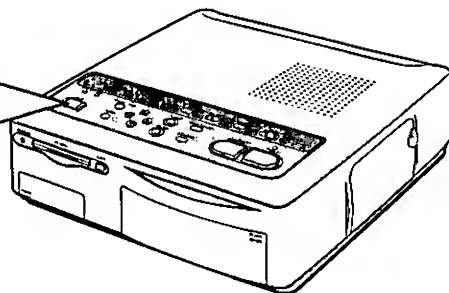
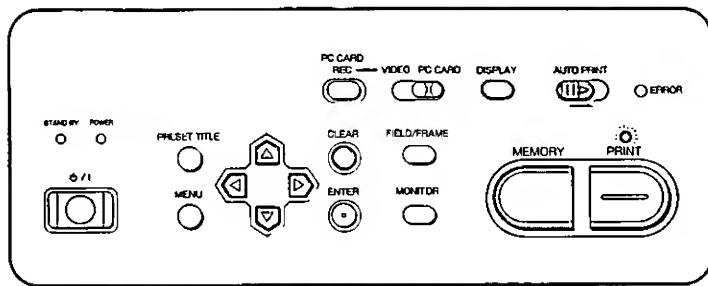
3. Press the PRINT Button.

PRINT



- Printing starts.

Printing Multiple Images at Once from a PC Card (Batch print)



Title

Printing Multiple Images at Once from a PC Card (Batch print)

This feature allows multiple images selected from the PC Card to be automatically printed.

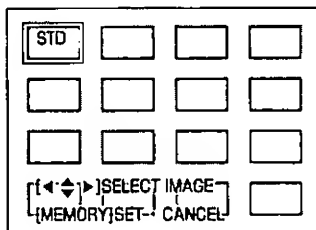
Procedure

1

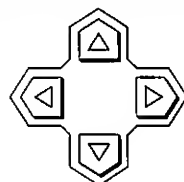
DISPLAY



If a Single-image Display is shown, press the Display Button to display the Index.

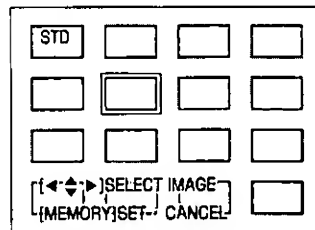


2



Use the ◀, ▶, ▲, and ▼ Buttons to select the image to be printed.

- When more than 16 images are recorded, you can go to the next Index Display by pressing the ▼ and ▶ Buttons several times.
- You can return to the previous Index Display by pressing the ▲ and ◀ Buttons several times.



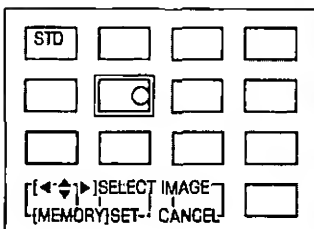
3

MEMORY



Press the MEMORY Button.

- The image is marked with a ○ mark.
- Pressing the MEMORY Button again will erase the ○ mark.
- Repeat Steps 2 and 3 to select a number of images.



4

AUTO PRINT



Slide the AUTO PRINT Lever.

- The PRINT Lamp flashes when printing starts.



Remarks, etc.

- The images are printed in the order they were selected in Steps 2 and 3.
- When printing is finished, the ○ mark is erased, and the memory is reset.
- After storing the images in memory, setting the INPUT SELECT Switch to "VIDEO" or turning the power off will reset the memory.

■To Print All the Images Recorded in the Card

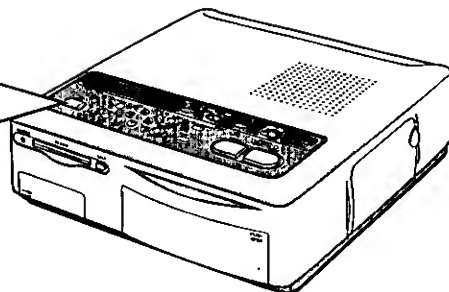
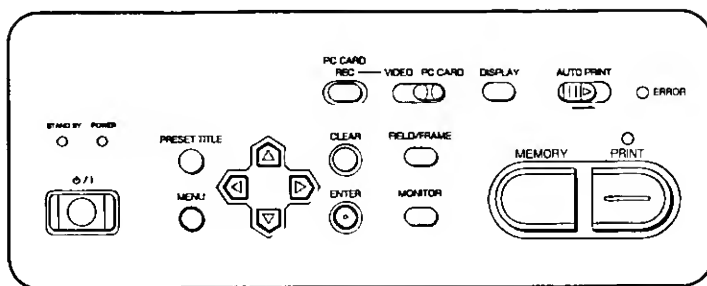
Slide the AUTO PRINT Lever.
(Steps 1, 2, and 3 are not necessary.)





■To Abort Printing

Press the CLEAR Button.

Although the image being printed will not stop, the following printing images will be canceled.

Using MENU Mode



Title	Procedure	
<p>Using MENU Mode</p> <p>The settings for the functions in the Photo Printer are made at the MENU Screen.</p>	<p>1</p> <p>MENU</p>  <p>Press the MENU Button. The MENU Screen is displayed on the television screen.</p>	<p>2</p>  or  <p>Use the ▲ and ▼ Buttons to select the desired menu. ●The  mark indicates the selected item.</p>
<p>■Menu Description</p>	<p>❶ PRINT: Use the ◀ and ▶ Buttons to set the number of prints (from 1 to 10) desired.</p> <p>❷ FORMAT: If [SET] is selected, use the ▲ and ▼ Buttons to select each print function. (p.34 - 37)</p> <p>❸ PICTURE: If [SET] is selected, you can adjust the picture quality. ●The setting procedure is identical to the procedure for video input. (p.18)</p> <p>❹ FRAME: If [SET] is selected, you can make your own trimming frame. (p.42)</p> <p>❺ TITLE: If [SET] is selected, you can make your own titles. (p.44)</p>	

CARD MENU

1	PRINT	: 1	
2	FORMAT	: [STD]	SET
3	PICTURE	: [STD]	SET
4	FRAME	: [OFF]	SET
5	TITLE	: [OFF]	SET
6	OSD	: [ON]	OFF
7	DELETE	: [NO]	YES
	[◀▶]CHANGE		
	[◆]SELECT [ENTER]END		

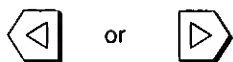
Single-image Screen

CARD MENU

1	PRINT	: 1	
2	FORMAT	: [STD]	SET
6	OSD	: [ON]	OFF
7	DELETE	: [NO]	YES
	[◀▶]CHANGE		
	[◆]SELECT [ENTER]END		

Index Display

3



Use the ◀ and ▶ Buttons to select the desired setting.

- The selected setting is indicated by brackets [].

4

ENTER



Press the ENTER Button to complete the setting.

- The MENU Screen disappears from the television screen.

Remarks,etc.

- The ◀ ▶ ▲ ▼ Buttons, ENTER Button, and ⏻ / I (Power) Button are the only buttons that function while the MENU Screen is displayed.
- The menu operations do not function when the picture image is being output. Operation can be performed once the complete picture appears.
- Once you set "PICTURE," [ADJ] is displayed on the MENU Screen. The previous settings are maintained in memory until you select [SET] to implement the new settings.
- Once you set "FRAME" or "TITLE," [ON] is displayed on the MENU Screen. The previous settings are maintained in memory until you select [SET] to implement the new settings.
- The stored settings are erased when the power cable is unplugged.

6 OSD (On Screen Display):

Use the ◀ and ▶ Buttons to select [ON] or [OFF] for the screen display.

- Error messages, menus, and the preset title menu are still displayed even when [OFF] is selected for OSD.

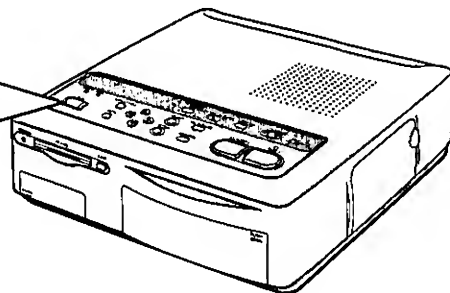
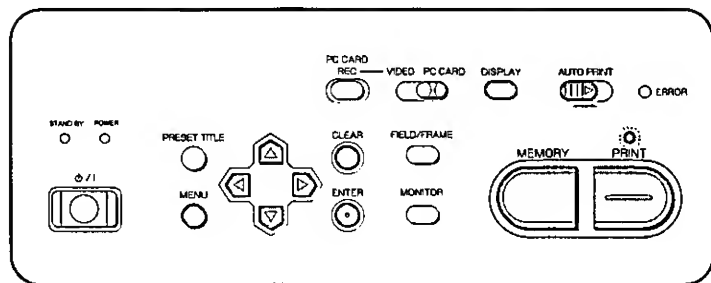
(The setting for OSD is still stored even when the INPUT SELECT Switch is set to "VIDEO".)

7 DELETE:

Use the ◀ and ▶ Buttons to select [YES] or [NO] for allowing images in the PC Card to be erased (p.38).

- During Index Display, only 1, 2, 6, and 7 are shown. (PICTURE, FRAME, and TITLE are not shown.)

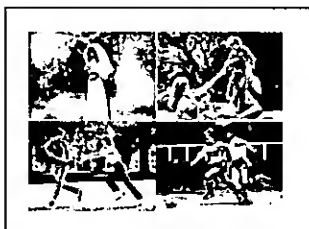
Printing a Series of Different Pictures on the Same Print (ALBUM)



Title

Procedure

Printing a Series of Different Pictures on the Same Print (ALBUM)



- This printing function allows you to divide the screen into 4, 9, or 16 mini-frames containing different pictures, and then print them all together on the same print.
- This feature is useful for printing a variety of scenes from a vacation on a single print.
- When using the 16 Pre-Cut Adhesive paper PV-MPAS16 (sold separately), select ALBUM: [16] in Step 3.

1

MENU



Press the MENU Button, and then use the ▼ Button to select "FORMAT".

CARD MENU			
PRINT	: 1		
FORMAT	: [STD]	SET	
PICTURE	: [STD]	SET	
FRAME	: [OFF]	SET	
TITLE	: [OFF]	SET	
OSD	: [ON]	OFF	
DELETE	: [NO]	YES	
[◀▶]SELECT		[ENTER]END	

2



Use the ► Button to select [SET].

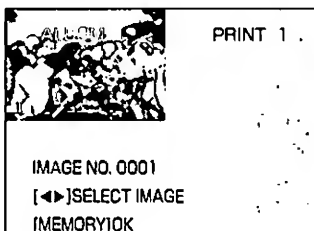
CARD MENU			
PRINT	: 1		
FORMAT	: STD	(SET)	
PICTURE	: [STD]	SET	
FRAME	: [OFF]	SET	
TITLE	: [OFF]	SET	
OSD	: [ON]	OFF	
DELETE	: [NO]	YES	
[◀▶]SELECT		[ENTER]END	

5

MEMORY



Use the ◀ and ▶ Buttons to select the desired image to be printed, and then press the MEMORY Button.



6

PRINT



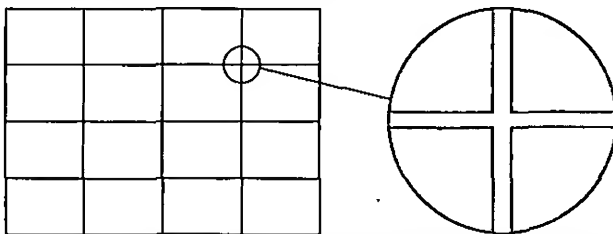
Repeat Step 5, and after storing the number of images which fill up the screen, press the PRINT Button.

- Printing starts.



Printing for 16 Mini-frame Pictures

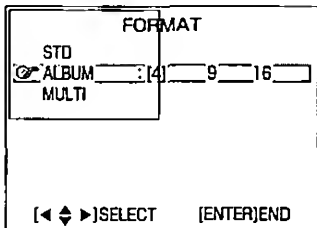
16 mini-frame pictures are printed separated by white lines.
(The horizontal lines are displayed on the television screen, but the vertical lines are not displayed.)



3



Use the ▼ Button to select "ALBUM", and then use the ◀ and ▶ Buttons to select the desired number of mini-frames.

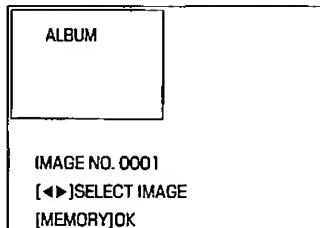


4

ENTER

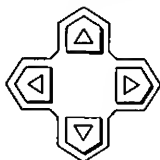


Press the ENTER Button.



■To Select the Desired Image Displayed on the Index Display

1. After Step 4, press the DISPLAY Button.
2. Use the ◀, ▶, ▲, ▼ Buttons to select desired image to be printed, and then press the MEMORY Button.



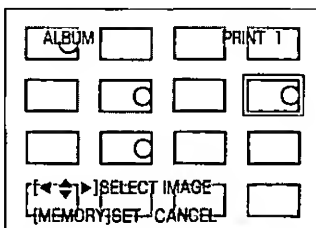
MEMORY



- The image is marked with a ○ mark.
- This operation can be performed only for the number of images on the screen.

3. Press the DISPLAY Button to confirm the print images.
(Please be careful when pressing the DISPLAY Button since pressing it twice will clear the memory.)
4. Press the PRINT Button.

DISPLAY



Remarks, etc.

■To Erase Stored Pictures

Press the CLEAR Button when the PRINT Lamp is lit.

■To Abort the Setting Process

Press the CLEAR Button several times to completely clear the memory screen. Pressing the MENU Button when the Index Display is displayed will return you to the CARD MENU.

■To Print Various ALBUM Prints from Different Screens at the Same Time

1. Use the ◀, ▶, ▲, and ▼ Buttons and MEMORY Button to select the various different types of images.
2. Slide the AUTO PRINT Lever.

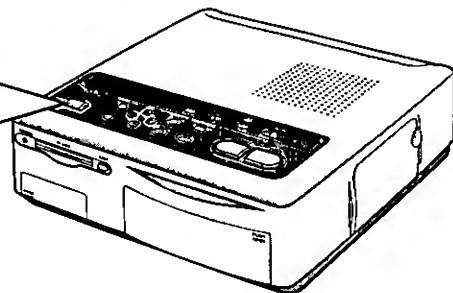
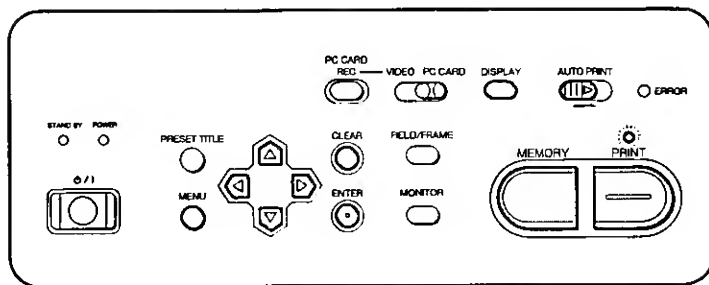
AUTO PRINT



- Example: If ALBUM:[4] is selected when printing 8 selected images, then the first print will have the first to the fourth selected images, and the second print will have the fifth to the eighth selected images.

- The ALBUM Screen shows white spaces where no image was saved. There is no editing operation that makes it possible to print images interspersed with blank (white) images.

Printing the Same Picture Repeatedly on the Same Print (MULTI FRAME)



Title

Procedure

Printing the Same Picture Repeatedly on the Same Print (MULTI FRAME)



- This feature allows you to divide the paper into 4, 9, or 16 mini-frames, and then print the same stored image, reduced in size, in each mini-frame.
- This feature is useful for printing head portraits for business cards when using the Print Set for adhesive paper.
- When using the 16 Pre-Cut Adhesive paper PV-MPAS16 (sold separately), select MULTI: [16] in Step 3.

1

MENU



Press the MENU Button, and then use the ▼ Button to select "FORMAT".

CARD MENU			
PRINT	: 1		
FORMAT	: [STD]	SET	
PICTURE	: [STD]	SET	
FRAME	: [OFF]	SET	
TITLE	: [OFF]	SET	
OSD	: [ON]	OFF	
DELETE	: [NO]	YES	
[◀▶]SELECT		[ENTER]END	

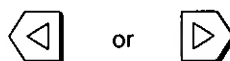
2



Use the ► Button to select [SET].

CARD MENU			
PRINT	: 1		
FORMAT	: [STD]	[SET]	
PICTURE	: [STD]	SET	
FRAME	: [OFF]	SET	
TITLE	: [OFF]	SET	
OSD	: [ON]	OFF	
DELETE	: [NO]	YES	
[◀▶]SELECT		[ENTER]END	

5



Use the ◀ and ▶ Buttons to select the desired image to be printed.



6

PRINT



Press the PRINT Button.
• Printing starts.



3



Use the ▼ Button to select "MULTI", and then use the ◀ and ▶ Buttons to select the desired number of mini-frames.

FORMAT	
STD	
ALBUM	
◉ MULTI	[4] [9] [16]
[◀▶]SELECT [ENTER]END	

4

ENTER

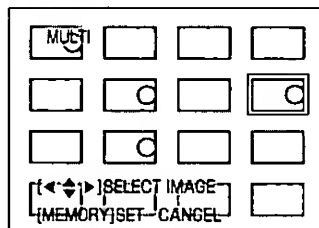


Press the ENTER Button.

Remarks, etc.

■To Print Various Types of Different MULTI FRAME Prints from the Same Screen at the Same Time

1. After Step 4 on the previous page, press the DISPLAY Button so that the Index Display is shown.
2. Use the ◀, ▶, ▲, and ▼ Buttons and MEMORY Button to select the various different types of images.



3. Slide the AUTO PRINT Lever.

AUTO PRINT



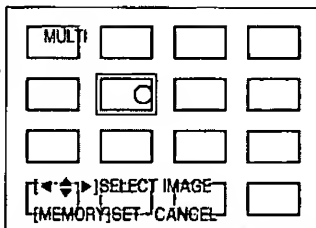
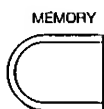
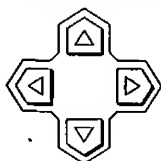
■To Select the Desired Image Displayed on the Index Display

1. After Step 4, press the DISPLAY Button.

DISPLAY



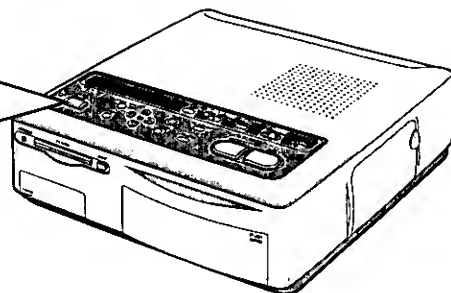
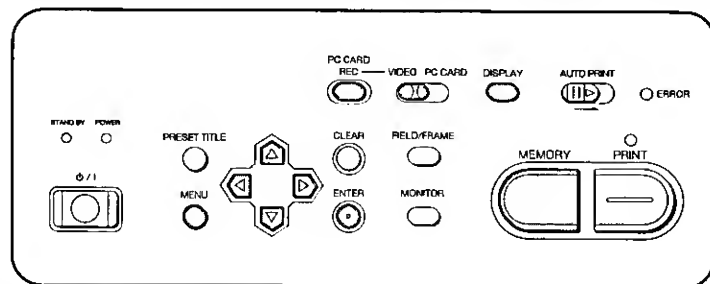
2. Use the ◀, ▶, ▲, ▼ Buttons to select the desired image to be printed, and then press the MEMORY Button.



- The image is marked with a ◉ mark.
- Pressing the MEMORY Button again will erase the ◉ mark.

3. Press the DISPLAY Button to confirm the print images.
4. Press the PRINT Button.

Erasing the Images on the PC Card / Recording the Video Input Image on the PC Card



Title	Procedure																																																							
<p>Erasing the Images on the PC Card (Erasing card images)</p> <p>The images stored on the PC Card can be erased one at a time.</p>	<p>1</p> <p>MENU → ▼</p> <p>Press the MENU Button, and then use the ▼ Button to select "DELETE".</p> <table border="1" data-bbox="642 957 951 1186"> <thead> <tr> <th colspan="3">CARD MENU</th> </tr> </thead> <tbody> <tr> <td>PRINT</td> <td>: 1</td> <td></td> </tr> <tr> <td>FORMAT</td> <td>: [STD]</td> <td>SET</td> </tr> <tr> <td>PICTURE</td> <td>: [STD]</td> <td>SET</td> </tr> <tr> <td>FRAME</td> <td>: [OFF]</td> <td>SET</td> </tr> <tr> <td>TITLE</td> <td>: [OFF]</td> <td>SET</td> </tr> <tr> <td>OSD</td> <td>: [ON]</td> <td>OFF</td> </tr> <tr> <td>DELETE</td> <td>: [NO]</td> <td>YES</td> </tr> <tr> <td colspan="3">[◀▶]SELECT [ENTER]END</td> </tr> </tbody> </table>	CARD MENU			PRINT	: 1		FORMAT	: [STD]	SET	PICTURE	: [STD]	SET	FRAME	: [OFF]	SET	TITLE	: [OFF]	SET	OSD	: [ON]	OFF	DELETE	: [NO]	YES	[◀▶]SELECT [ENTER]END			<p>2</p> <p>▶</p> <p>Use the ▶ Button to select [YES].</p> <table border="1" data-bbox="1005 957 1314 1186"> <thead> <tr> <th colspan="3">CARD MENU</th> </tr> </thead> <tbody> <tr> <td>PRINT</td> <td>: 1</td> <td></td> </tr> <tr> <td>FORMAT</td> <td>: [STD]</td> <td>SET</td> </tr> <tr> <td>PICTURE</td> <td>: [STD]</td> <td>SET</td> </tr> <tr> <td>FRAME</td> <td>: [OFF]</td> <td>SET</td> </tr> <tr> <td>TITLE</td> <td>: [OFF]</td> <td>SET</td> </tr> <tr> <td>OSD</td> <td>: [ON]</td> <td>OFF</td> </tr> <tr> <td>DELETE</td> <td>: [NO]</td> <td>[YES]</td> </tr> <tr> <td colspan="3">[◀▶]SELECT [ENTER]END</td> </tr> </tbody> </table>	CARD MENU			PRINT	: 1		FORMAT	: [STD]	SET	PICTURE	: [STD]	SET	FRAME	: [OFF]	SET	TITLE	: [OFF]	SET	OSD	: [ON]	OFF	DELETE	: [NO]	[YES]	[◀▶]SELECT [ENTER]END		
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OSD	: [ON]	OFF																																																						
DELETE	: [NO]	[YES]																																																						
[◀▶]SELECT [ENTER]END																																																								
<p>Recording the Video Input Image on the PC Card (Recording images on the PC Card)</p> <ul style="list-style-type: none"> • This function allows images from the VIDEO IN Socket or the S-VIDEO IN Socket to be recorded on the PC Card as still images. • The images are recorded as still images. • Approximately 40 images can be recorded on a 4-MB capacity PC Card. However, this may vary depending on the stored image. 	<p>1</p> <p>Connect the necessary devices, and then prepare the desired image to be recorded on the PC Card.</p> <ul style="list-style-type: none"> • Connections (p.9) 	<p>2</p> <p>VIDEO PC CARD</p> <p>←</p> <p>Set the INPUT SELECT (VIDEO / PC CARD) Switch to "VIDEO".</p>																																																						

■ To Select the Desired Image to be Erased from the Index Display Screen.

1. Press the **DISPLAY** Button so that the Index Display is shown.

DISPLAY



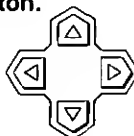
2. At the **MENU** Screen, select **"DELETE"**, and then select **[YES]**.

CARD MENU

PRINT	: 1	
FORMAT	: [STD]	SET
OSD	: [ON]	OFF
[G] DELETE	: NO	[YES]

[<>] CHANGE
[] SELECT [ENTER] END

3. Use the **◀, ▶, ▲, and ▼** Buttons to select the image to be erased, and then press the **ENTER** Button.

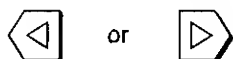


ENTER



	DELETE THIS IMAGE		
[<>] SELECT IMAGE			
[ENTER] DELETE			
[CLEAR] CANCEL			

3



Use the **◀** and **▶** Buttons to select the desired image to be erased.



4

ENTER



Press the **ENTER** Button.

- When the image is erased, the screen returns to the **CARD MENU**. To continue erasing images, repeat Steps 2 and 3.

NOW DELETING

[<>] SELECT IMAGE
[ENTER] DELETE
[CLEAR] CANCEL

Remarks, etc.

- Once an image has been erased, it cannot be restored. Check carefully before erasing any images.
- Never remove the PC Card or press the **⏻ / I (Power)** Button to turn off the Photo Printer while the image is being erased (when the **ACCESS** Lamp is lit up). This could damage the format of the card and make it unusable.
- Images can be erased either from the Single-image Display and Index Display.

3

MEMORY



Start playback of the video equipment, and then while viewing the television screen, press the **MEMORY** Button at the scene to be recorded on the card.

- The scene is stored in the Photo Printer memory.

4

PC CARD REC



Press the **PC CARD REC** Button.

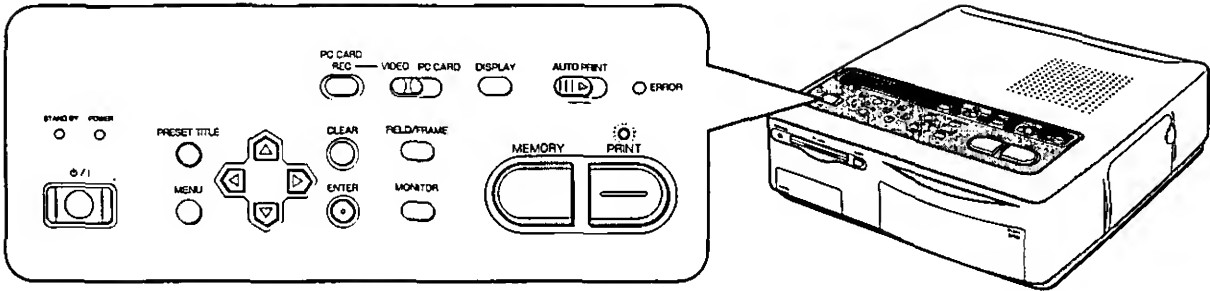
- The scene is stored in the PC Card from the Photo Printer memory.
- The **ACCESS** Lamp lights up while the image is being recorded.

STD FRAME PRINT 1

NOW RECORDING

- Never remove the PC Card or turn off the Photo Printer while the image is being recorded (when the **ACCESS** Lamp is lit up). This could damage the format of the card and make it unusable.
- Images cannot be recorded on the PC Card with **MULTI FRAME** Mode.
- Data stored in the PC Card undergoes image compression. In some cases, this can deteriorate the image when it is stored on the card.
- Images are stored in the PC Card without the setting adjustments made to the picture quality.
- Blurred images are stored without any adjustments.
- Titles are not stored.
- Wide images cannot be stored in wide format in the PC Card.

Printing with Title or Trimming Frame (Preset title)



Title

Procedure

Printing with Title or Trimming Frame (Preset title)

This feature uses preset titles to add titles or trimming frames to the image.

- The Photo Printer includes 14 examples of preset titles and 8 illustrations. (See next page.)
- Some of the greeting examples are colored.

Colors	Example Number
Black	1, 3, 13
Red	7, 8, 9, 12, 14
Cyan, Blue	5, 10
Pink	2, 4
Green	6, 11

1

PRESET TITLE

Press the **PRESET TITLE** Button.

- If the Index Display Screen is shown when using the PC Card, press the PRESET TITLE Button after switching to Single-image Display.

TITLE	
[THANK YOU]	MISS YOU
HOW ARE	MARRIED
BOY	HALLOWEEN
GIRL	BIRTHDAY
MOTHERS	GREETINGS
FATHERS	XMAS
CONGRATS	HOLIDAYS
ILLUSTRATION	
[PRESET]CANCEL	
[◀▶]SELECT	[ENTER]OK

2

ENTER

Use the **◀, ▶, ▲, and ▼** Buttons to make a selection, and then press the **ENTER** Button.

TITLE	
[THANK YOU]	MISS YOU
HOW ARE	MARRIED
BOY	HALLOWEEN
GIRL	BIRTHDAY
MOTHERS	GREETINGS
FATHERS	XMAS
CONGRATS	HOLIDAYS
ILLUSTRATION	
[PRESET]CANCEL	
[◀▶]SELECT	[ENTER]OK

5

ENTER

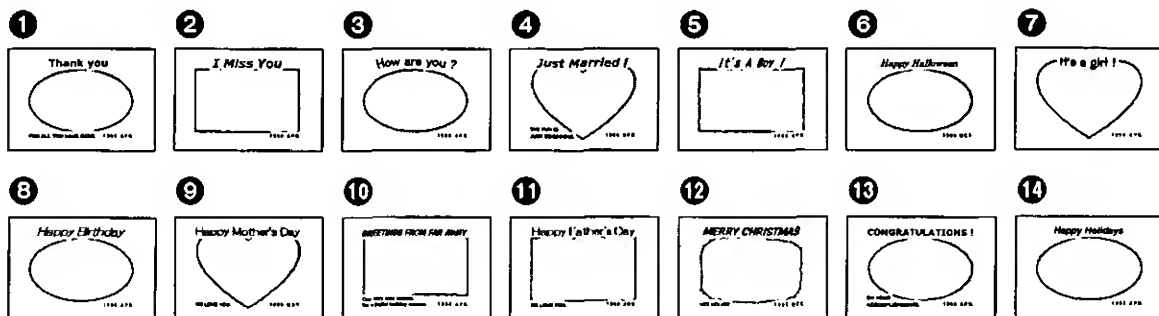
Use the **▲ and ▼** Buttons to select the "MONTH", and then press the **ENTER** Button.

- You can change to the desired month using the **◀** and **▶** Buttons.

[MONTH] [JAN]	
OFF	
[PRESET]CANCEL	
[◀▶]CHANGE	
[◀▶]SELECT	[ENTER]OK

6

Print the title and image.



15 ILLUSTRATION

Remarks, etc.

- Although a portion of the title display is not shown on the television screen, this has no effect on the printing.
- The year can be set from 1997 to 2028.
- All data stored in the memory is erased when the Photo Printer is turned off.
- To turn off a trimming frame or title on the television screen, press the PRESET TITLE Button.
- To turn off either the trimming frame or title only, set FRAME or TITLE in MENU Mode to [OFF]. (Switching this setting to [ON] again will display the trimming frame or title again.)

■ To Abort the Setting Process

Press the PRESET TITLE Button.

- When an 15 Illustration is inserted into an image from a PC Card, the right and left sides of the illustration will become slightly shortened.

3

ENTER



Use the ▲ and ▼ Buttons to select the "TEXT", and then press the ENTER Button.

- Text cannot be selected for examples 2, 3, 5, 6, 7, 8, and 10.

[TEXT:] [FOR ALL YOU:]
OFF

[PRESET] CANCEL
[◀] SELECT [ENTER] OK

4

ENTER



Use the ▲ and ▼ Buttons to select the "YEAR", and then press the ENTER Button.

- You can change to the desired year using the ◀ and ▶ Buttons.

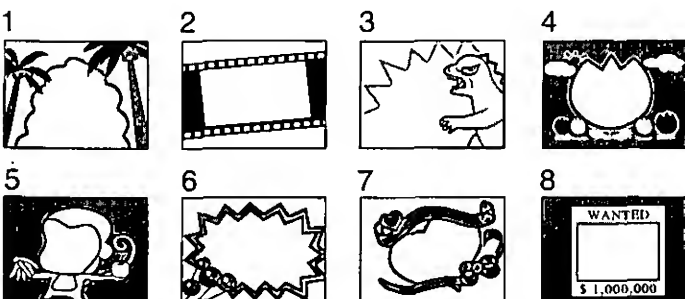
[YEAR:] [1998]
OFF

[PRESET] CANCEL
[◀▶] CHANGE
[◀] SELECT [ENTER] OK

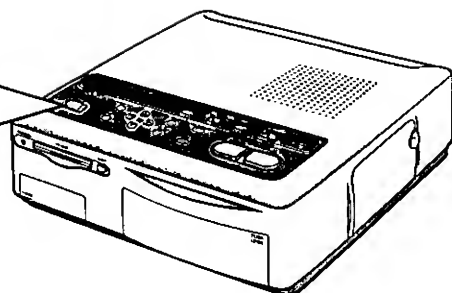
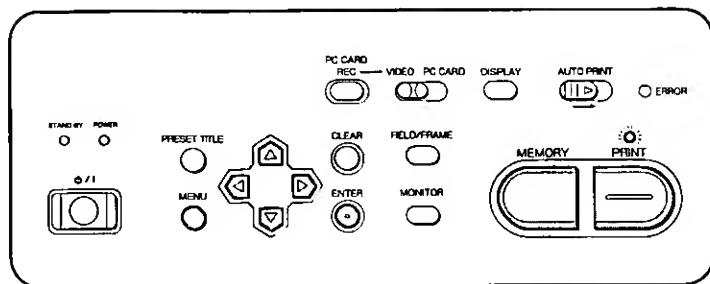
ILLUSTRATION 1

[PRESET] CANCEL
[◀▶] CHANGE [ENTER] OK

- 15 Selecting "ILLUSTRATION" allows you to choose from the eight illustrations 1 to 8. Use the ◀ and ▶ Buttons to select one of the illustrations 1 to 8, and then press the ENTER Button.



Printing with Trimming Frame



Title

Printing with Trimming Frame

A trimming frame can be made in one of two possible ways.



- ❶ Selecting from one of the preset trimming frames: SQUARE, OVAL, FROST, or HEART
(The size of the SQUARE trimming frame can be adjusted.)
 - Trimming can be used to cover black bands appearing at the top, bottom or around the image (such as for movie scenes).
- ❷ Capturing with your Video Camera a trimming frame that you created

Procedure

1

Press the MENU Button.

Example: Video Input

MENU		
[G] PRINT	:	[]
FORMAT	:	[STD] SET
PICTURE	:	[STD] SET
FRAME	:	[OFF] SET
TITLE	:	[OFF] SET
OSD	:	[ON] OFF
WIDE	:	[AUTO] ON OFF
[◀▶]CHANGE		
[◀▶]SELECT [ENTER]END		

2

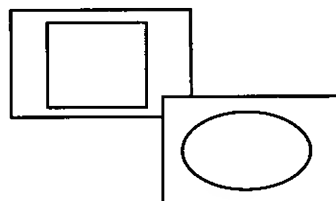
Use the ▼ Button to select "FRAME".

MENU		
PRINT	:	1
FORMAT	:	[STD] SET
PICTURE	:	[STD] SET
[G] FRAME	:	[OFF] SET
TITLE	:	[OFF] SET
OSD	:	[ON] OFF
WIDE	:	[AUTO] ON OFF
[◀▶]SELECT [ENTER]END		

❶ When "SELECT" is chosen

Select one of the four trimming frames: SQUARE, OVAL, FROST, and HEART. Then, select [YES].

- The size of the SQUARE trimming can be adjusted by using the ◀, ▶, ▲, and ▼ Buttons.



5

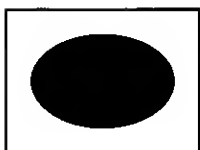
If "OVERLAY" was selected in Step 4, press the ENTER Button.

6

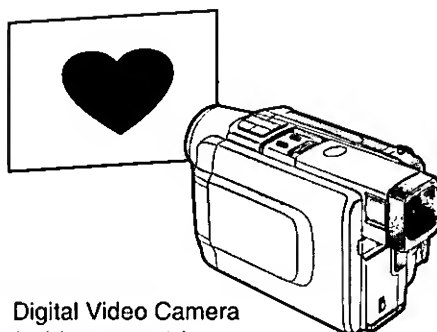
To perform inside-outside reversal, use the ▼ Button to select "IN-OUT". Next, use the ▶ Button to select [YES], and then select "INSIDE" or "OUTSIDE".

FRAME		
SELECT OVERLAY	:	[]
[G] IN-OUT	:	NO [YES]
[◀▶]SELECT [ENTER]END		

1



2



Digital Video Camera
(sold separately)

3

Use the **▶** Button to select [SET].

MENU			
PRINT	: 1		
FORMAT	: [STD]	SET	
PICTURE	: [STD]	SET	
FRAME	: [OFF]	[SET]	
TITLE	: [OFF]	SET	
QSD	: [ON]	OFF	
WIDE	: [AUTO]	ON	OFF
[◀▶]SELECT [ENTER]END			

4

Use the **▼** Button to select one of the two methods, and then use the **▶** Button to select [YES].

FRAME			
[◀]SELECT	: NO	[YES]	
OVERLAY			
[◀▶]SELECT [ENTER]END			

Remarks, etc.

- When a trimming frame is stored in memory, [ON] appears on the MENU Screen.
- A trimming frame stored in memory is lost when the Digital Photo Printer is turned off.
- When a new trimming frame is stored in memory, the previous trimming frame is erased.
- When a preset title is used, the previous trimming frame is lost.
- When capturing the title or trimming frame with a Video Camera, shine the lighting at a 45-degree angle to prevent reflection.
- To temporarily turn off a trimming frame stored in memory displayed on the screen, set "FRAME" in MENU Mode to [OFF]. (When the setting is switched back to [ON], the stored trimming frame reappears on the screen.)
- When creating your own frame, use a black marker on white paper.

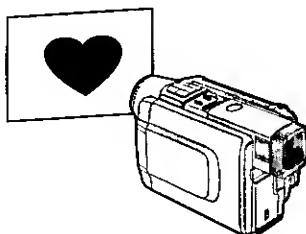
■INSIDE, OUTSIDE

- INSIDE :The image is inserted inside the stored frame.
- OUTSIDE :The image is inserted outside the stored frame.

② When "OVERLAY" is chosen

A trimming frame that you created is captured with your Video Camera, and the trimming frame is adjusted for optimum appearance.

- The value can be adjusted over a range from -9 to +9. Positive values make the trimming frame lighter, and negative values make the trimming frame darker.



7 Press the ENTER Button.

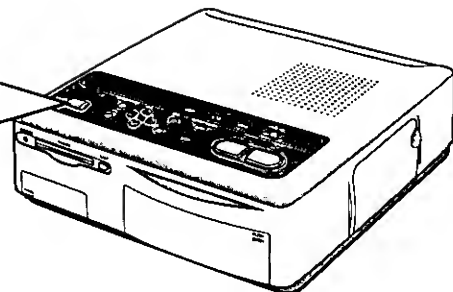
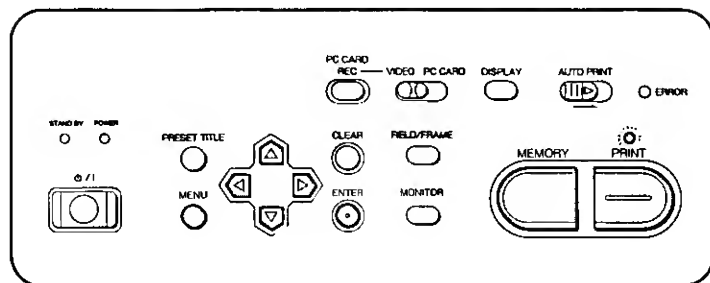
(If the menu is displayed, hold down this button until the menu disappears.)



8

Print the trimming frame.

Printing with a Title (Inserting your own titles)



Title

Printing with a Title (Inserting your own titles)

With this function, you can use your Video Camera to capture titles that you created, allowing you to add an original title to the image.



Procedure

1 Press the MENU Button.

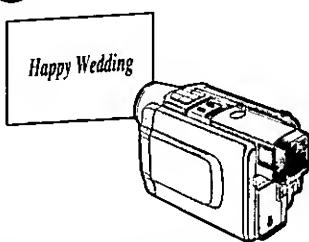
Example: Video Input

MENU		
<input checked="" type="checkbox"/> PRINT	:	1
FORMAT	:	[STD] SET
PICTURE	:	[STD] SET
FRAME	:	[OFF] SET
TITLE	:	[OFF] SET
OSD	:	[ON] OFF
WIDE	:	[AUTO] ON OFF
[◀▶]CHANGE		
[◀▶]SELECT		
	[ENTER]END	

2 Use the ▼ Button to select "TITLE".

MENU		
PRINT	:	1
FORMAT	:	[STD] SET
PICTURE	:	[STD] SET
FRAME	:	[OFF] SET
<input checked="" type="checkbox"/> TITLE	:	[OFF] SET
OSD	:	[ON] OFF
WIDE	:	[AUTO] ON OFF
[◀▶]SELECT		
	[ENTER]END	

5



Adjust the level, and then press the ENTER Button.

- The value can be adjusted over a range from -9 to +9. Positive values make the title darker, and negative values make the title lighter.

6

Print the title with the image.

<input checked="" type="checkbox"/> LEVEL	:	6
[◀▶]ADJUST		
	[ENTER]OK	

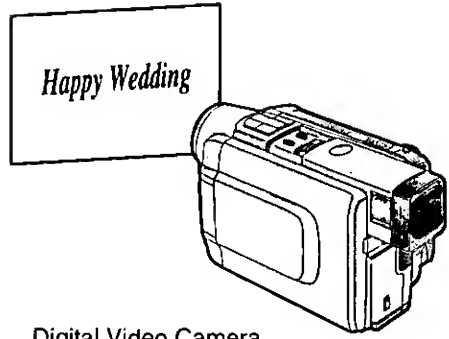
Changing the Color of the Title

1. Select "COLOR CHANGE : WHOLE", and then select [YES].

TITLE		
OVERLAY		
COLOR CHANGE		
<input checked="" type="checkbox"/> WHOLE	:	[NO] [YES]
PART		
[◀▶]SELECT		
	[ENTER]END	

2. Use the ▲ and ▼ Buttons to select the color, and then press the ENTER Button.

<input checked="" type="checkbox"/> CYAN		
RED		
MAGENTA		
YELLOW		
WHITE		
BLACK		
BLUE		
GREEN		
[◀▶]SELECT		
	[ENTER]OK	



Digital Video Camera
(sold separately)

3 Use the ► Button to select [SET].

MENU		
PRINT	: 1	
FORMAT	: [STD]	SET
PICTURE	: [STD]	SET
FRAME	: [OFF]	SET
[G] TITLE	: [OFF]	[SET] []
OSD	: [ON]	OFF
WIDE	: [AUTO]	ON OFF
[◀▶]SELECT [ENTER]END		

4 Use the ◀ and ▶ Buttons to select [YES].

TITLE	
[G] OVERLAY	: NO [YES] []
[◀▶]SELECT [ENTER]END	

Remarks, etc.

- A title stored in memory is lost when the Digital Photo Printer is turned off.
- When a new title is stored in memory, the previous title is erased.
- To temporarily erase a title stored in memory from the screen, set "TITLE" in MENU Mode to [OFF].
(When the setting is switched back to [ON], the stored title reappears on the screen.)
- When creating your own title, use a black marker on white paper.
- The MACRO function on the Video Camera is useful for capturing titles.
Be sure to also read the Operating Instructions for the Video Camera.

■ Changing the Color of Part of the Title

1. Select "PART", and then select [YES].

TITLE	
OVERLAY	
COLOR CHANGE	
WHOLE	
[G] PART	: NO [YES] []
[◀▶]SELECT [ENTER]END	

2. Use the ◀, ▲, ▼, and ▶ Buttons to select the upper left limit for the color, and then press the ENTER Button.

Upper Left Corner

[◀▶]SET START [ENTER]OK	

3. Use the ◀, ▲, ▼, and ▶ Buttons to select the size for the color, and then press the ENTER Button.

[◀▶]SET SIZE [ENTER]OK	

4. Use the ▲ and ▼ Buttons to select the color, and then press the ENTER Button.

Connections When Using as Personal Computer Printer

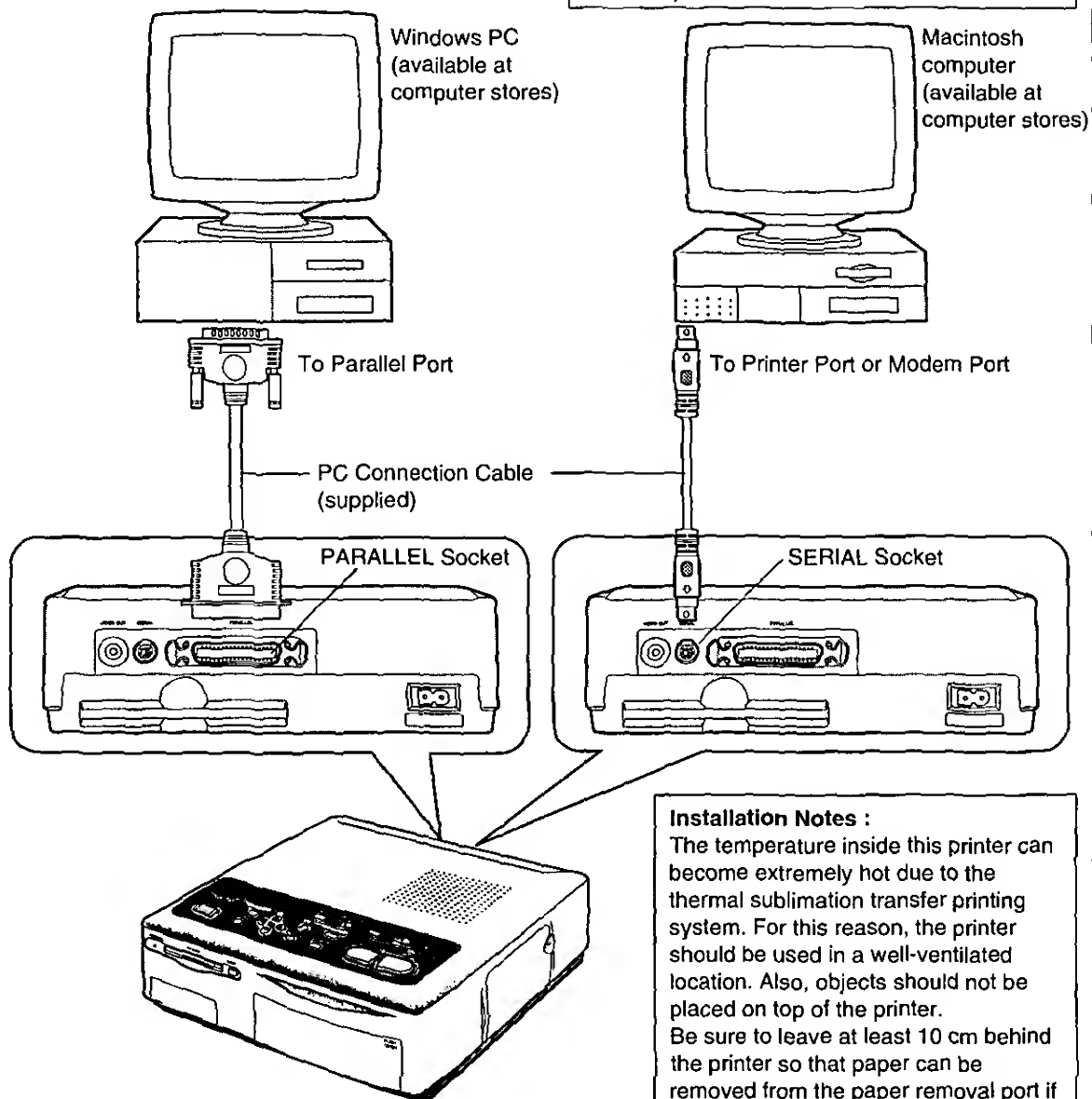
■ When Connecting to a Windows (PC/AT) Computer:

A PC Connection Cable for Windows (supplied) is required to connect the Photo Printer.

■ When Connecting to a Macintosh Computer:

A PC Connection Cable for Macintosh (supplied) is required to connect the Photo Printer.

After connecting the computer to the Video Printer, the settings (Setup) are performed at the Windows PC or the Macintosh computer. Refer to the separate Printer Driver Manual for more information.



Precautions

■Precautions when using the Digital Photo Printer

- If the Photo Printer emits smoke, becomes unusually hot, or gives off an unusual smell, turn off the printer and unplug it.
- If water or other foreign matter gets inside the printer, turn off the printer and unplug it.
- If the surface of the printer becomes broken or cracked, turn off the printer and unplug it.
- If the power cable is damaged (such as the core wires being exposed), turn off the printer and unplug it.
- Do not use the Photo Printer in any way which overloads the electric outlet or wiring. Also, only AC 120 V should be used as the power supply for the Photo Printer.
- Make sure the plug is properly plugged in when using the Photo Printer.
- Do not damage the power cable or plug.
- Remove dust or other foreign matter adhering to the power plug.
- Do not place the Photo Printer on unsteady, inclined, or other unstable surfaces.
- Do not place flower vases, containers with water, or small metal objects on the Photo Printer.
- Do not drop or insert metal or flammable objects inside the Photo Printer.
- Do not splash or wet the Photo Printer.
- Do not disassemble or remodel the Photo Printer.
- Do not touch the metal parts on the Photo Printer or the plug during a thunderstorm.
- Do not unplug with wet hands.
- Do not place the Photo Printer in locations with smoke, steam, high humidity, large amounts of dust, or severe vibrations.
- Do not install the Photo Printer in such a way that the power cable is forcibly bent.
- Do not cover the ventilation holes on the Photo Printer.
- Do not place heavy objects on the Photo Printer.
- Do not move the Photo Printer with the power cable plugged in.
- Do not unplug by pulling on the power cable.
- Remove the plug from the outlet as a safety measure when cleaning the Photo Printer or when the Photo Printer will not be used for a long


period of time.

- Do not touch any internal components other than those specified.
- Do not remove the Paper Cassette while printing is in progress.
During printing, the paper moves forward and backward three times. You can be cut if you touch the paper during this operation.

■Notes on Handling the Ink Cassettes, Ink Cassette Film, Paper Cassette, and Paper

To ensure high-quality, precise printing, always observe the following points.

Failure to observe these points can not only result in poor-quality prints, but also paper jams or breakdown of the Photo Printer.

- Use only the specified paper.
Use Print Sets that carry the  mark or that have been specified for use with this Photo Printer by Panasonic.
- Use the Ink Cassette with the paper provided in the same box.
One Ink Cassette is designed to provide enough ink film to print the number of sheets provided in that Print Set.
- Do not remove the label from the Ink Cassette.
Doing so could lead to mistaken operation.
- Before loading an Ink Cassette, take up any slack in the ink film (wide tape inside the Ink Cassette).
The slack can be taken up by turning the spool in the direction of the arrow.
- Make sure that the Ink Cassette is oriented properly and insert it all of the way in.
- Do not touch or pull on the ink film.
- Do not get fingerprints or dust on the ink film or on the paper.
- Do not get the ink film or the paper wet.
- Do not touch the Ink Cassette or the Paper Cassette while printing is in progress.
The Ink Cassette cannot be taken out while printing is in progress.
Forcibly pulling out the Ink Cassette, loading too much paper, or applying strong pressure or vibrations to the Paper Cassette could result in a paper jam or other malfunction.
(Do not take out the Paper Cassette and add paper while printing is in progress.)
- Do not attempt to reuse an empty Ink Cassette or paper which has already been printed on.
Doing so could result in malfunction or breakdown of the Photo Printer.

Precautions (Cont.)

- Fan the paper thoroughly before placing it in the Paper Cassette.
Sheets that adhere to other sheets can cause a paper jam.
- Do not fold or bend the paper.
If a postcard is curled, remove the curl before attempting to use the postcard in the printer.
- Do not load the paper upside-down.
The glossy side of the paper with no markings on it is the printing side. The paper should be loaded with this side facing up.
- Do not write on the paper before printing on it.
This could lead to mistaken operation.
- Do not load too much paper in the Paper Cassette.
No more than 25 sheets should be loaded.
- Allow the Print Set to adjust to the ambient temperature before using it.
If the Print Set has been stored at a low temperature, condensation could form on the paper when brought into a warmer room. Do not open the Print Set package until it has reached the room temperature.
- Do not leave printed paper above the Paper Cassette (in the Print Exit).
Do not allow more than 10 sheets to accumulate above the Paper Cassette.
- Do not place foreign objects above the Paper Cassette (in the Print Exit).

■ Notes on Print Set Storage

- Do not store the Ink Cassettes or paper under high temperatures or high humidity.
Doing so could result in a deterioration of printing quality.
- Do not store the paper on end.
Store the paper flat in its original silver bag.
- Do not store Ink Cassettes or paper in a location exposed to direct sunlight.
Doing so will result in a deterioration of printing quality. The Ink Cassette and paper could even become unusable.
- After using the Photo Printer, remove the Ink Cassette and paper and put them back in storage.
If the Ink Cassette is left in the Photo Printer, slack will develop in the ink film and dust will collect, which may make high-quality printing impossible.
In order to keep leftover paper in optimum condition for as long as possible, remove the

paper from the Photo Printer, and then place it in the original silver bag for storage.

■ Notes on Handling Finished Prints

In order to preserve finished prints in the best condition, always observe the following points. Failure to observe these points could result in a deterioration of print quality or a slight injury.

- Do not affix cellophane tape to the printed surface.
- Do not touch the printed surface with your fingers.
- Do not let the printed surface come into contact with other objects.
Do not let the following materials in particular come into contact with the printed surface:
 - Desk pads or business card cases made of vinyl
 - Erasers made of plastic
- Do not spill or apply volatile solvents such as alcohol to the printed surface.
Doing so could result in discoloration or fading.
- Do not leave printed surfaces in contact with one another.
Doing so could cause color transfer between the two images. Color transfer could also occur if a printed surface is left in contact with any other type of paper under pressure for an extended period of time.
- Do not store prints under conditions of high temperature or high humidity.
Leaving prints under such conditions for an extended period of time could cause a deterioration in print quality. Do not leave prints exposed to direct sunlight.
- When prints are to be stored in an album, select an album that has nylon pockets.
Other materials could cause color transfer or discoloration.
(Polypropylene and cellophane are also acceptable materials.)

■ Notes on Handling the Digital Photo Printer

- Do not spray insecticides or other volatile materials on the printer.
If such materials come into contact with the printer, they can damage the surface of the printer or cause the finish to peel. Also, do not leave rubber or vinyl materials in contact with the printer for an extended period of time.
- When the printer will not be used for an extended period of time:
To conserve electric power, turn off the printer

and unplug it.

Leaving the printer idle for long periods can impair its functionality. Be sure to turn the power on and operate the printer once every six months.

- When transporting the printer by car or truck: Pack the printer carefully in its original packing materials. If you did not retain the packing materials, wrap the printer carefully in a blanket or other cushioning material to protect it. (Before transporting the Photo Printer, be sure to first remove the Paper Cassette and Ink Cassette, and then close the cover.)

■ Maintenance Notes

- Do not use benzene, paint thinner, or other solvents to clean the printer.
Most of the printer surface is plastic. Do not use solvents such as benzene and paint thinner to wipe the printer since they can damage the surface of the printer and cause the surface to peel.
To clean the printer surface, wipe up any dust with a soft, dry cloth.
If the Photo Printer is particularly dirty, soak the cloth in kitchen detergent (neutral) diluted with water and wring out thoroughly. Then, wipe off the dust with the cloth, and wipe again with a dry cloth.
When using a synthetic cloth, follow the precautions in the usage instructions.
- When dust accumulates around the ventilation holes on top of the printer:
After removing the Ink Cassette, use a vacuum cleaner to clean the dust from the ventilation holes. Dust that enters the printer through the ventilation holes can adhere to the ink film, making high-quality printing impossible. In this event, remove the Ink Cassette, and then clean the dust off the ink film.

■ Installation Notes

- Install the Photo Printer away from devices that generate magnetic fields
The magnetic fields generated by stereo speakers or large monitors will distort the image produced by the Photo Printer.
Electromagnetic waves produced in this Photo Printer and in televisions, video game machines, and other devices can cause mutual interference, disrupting both the display on the television screen and the print image.

■ Internal Temperature

- Although it varies with the ambient temperature, if the internal temperature of the Photo Printer rises above a certain level, the ERROR Lamp will flash and the error message "WAIT: COOLING" will appear on the television screen. In this situation, the printing operation will halt temporarily. This is not a malfunction. After waiting for a few minutes for the temperature to drop (four or five minutes at the most), the Photo Printer will automatically resume printing.
- The printing operation may be halted temporarily in any of the following cases, which will result in a longer than normal printing time:
 - When printing images continuously
 - When the ambient temperature is high
 - When the internal temperature of the printer rises quickly because the ventilation holes or other parts are blocked.
- Note that if two or more of these conditions exist, printing will take even longer. Therefore, make every effort to find a well-ventilated location for installing this printer.

■ Condensation

- When a bottle is taken out from a refrigerator in summer and left to stand for a while for instance, droplets of water will form on it. This phenomenon is known as condensation.
- Conditions for condensation
Condensation will form if the printer or Print Set is moved to a location with a considerable difference in temperature or humidity, such as:
 - A high-humidity location, such as one filled with steam
 - When suddenly moved from an air-conditioned environment to one with high temperatures and high humidity
 - A room that has just been heatedIn this event, turn the power on and wait for two hours.
If the paper or rollers are damp with condensation, the printed surface that is produced may be dirty.

■ About Functions

Q1: When printing, what are the differences between "Photo Shot" and normal video?

A1: When an image is shot using the "Photo Shot" function of a Digital Video Camera, the result will be a high-quality image with little noise or distortion. Therefore, a print of this image will be of higher quality than a print of a normal video image.

Q2: What kinds of Video Cameras can be connected to the Digital Photo Printer?

A2: Any type of Video Camera that is equipped with either an S-VIDEO OUT Socket or a VIDEO OUT Socket can be used. (p.9)

Q3: Can a title or trimming frame be input from a camera?

A3: You can input your own titles or trimming frames by shooting them with a Video Camera. (p.42 - 45)

Q4: How should I adjust the level settings when storing the trimming frame?

A4: The level adjustments are similar to the darkness adjustment on a copy machine. Under normal conditions, you do not need to adjust the settings. However, if the trimming frame which you created shows unwanted lines, then reduce the level of the trimming frame for the best appearance. (p.43)

Q5: Can the Digital Photo Printer print images from HDTV broadcasts?

A5: No, because the video signals are different.

Q6: What should I do about poor coloring?

A6: The most important factor is the coloring of the original shot of the image. The color and other parameters can be adjusted by selecting "PICTURE" on the MENU Screen. (p.18)

Q7: When I adjust the coloring and other aspects of picture quality, can I check the results on the television screen?

A7: Yes, this can be done for all the adjustments except SHARPNESS. The quality of the picture on the television monitor will differ slightly from the quality of the printed image. Test print the image, adjust the television so that the quality of the picture on the screen is close as possible to that of the printed image, and then adjust the Digital Photo Printer. (p.19)

Q8: Is it possible to insert a title for each ALBUM Mode screen?

A8: No, it is not possible in ALBUM Mode. It is possible in MULTI FRAME Mode, but it is not possible to insert a different title for each mini-frame.

Q9: Which should I use, the S-VIDEO IN Socket or the VIDEO IN Socket?

A9: When connecting a device that has an S-VIDEO OUT Socket, it is best to use the S-VIDEO IN Socket. Doing so will provide the best print quality. If devices are connected to both the S-VIDEO IN Socket and the VIDEO IN Socket, the S-VIDEO IN Socket takes precedence. (p.9)

Q10: What should I do if a paper jam occurs?

A10: Remove the paper from either the ❶ Rear Paper Removal Port or the ❷ Print Exit (above the Paper Cassette). If the paper cannot be removed, turn off the printer. Then, turn the printer on again and remove the paper from either ❶ or ❷. If the paper still cannot be removed, please contact your nearest Panasonic Dealer. (p.15)

■About the Digital Photo Printer in General

Q11: How should I store my prints?

A11: We recommend keeping them in an album. When doing so, make sure that the pockets are made of nylon, polypropylene, or cellophane. Using other materials may result in color transfer or discoloration. (p.48)

Q12: What is the "thermal sublimation transfer printing system"?

A12: This is a type of printing method offering excellent image quality. Other methods exist such as the direct thermal printing method.

Q13: What does the number of dots in a printed picture mean?

A13: A printed picture is made up of many dots. This printer prints 464 dots (vertical) × 672 dots (horizontal) during VIDEO Input Mode, and prints 478 dots (vertical) × 700 dots (horizontal) during PC Card Input Mode. The print size for PC Card input is slightly larger than the print size for Video input.

Q14: What does "256 color gradations" mean?

A14: It means that the Digital Photo Printer can express 256 gradations of color between white and the darkest color formed by the three primary colors. Because each of the three colors can be expressed in 256 gradations, the total number of colors is $256 \times 256 \times 256$ (full color).

Q15: How do the Ink Cassettes and paper work?

A15: The Ink Cassettes contain three colors in one unit: cyan, magenta, and yellow. The printing paper has a special coating that improves the adhesion of the ink.

■About the Paper and Ink Cassettes

Q16: How should I store the Ink Cassettes and paper after having opened them?

A16: Do not leave the Ink Cassettes or paper in a location exposed to direct sunlight, or in a location subjected to high temperature or high humidity. Place the cassette or paper back in its original silver bag, and then store them flat. (p.48)

These supplies should be used as soon as possible after they are opened.

Q17: What kind of paper can the Digital Photo Printer print on?

A17: The Digital Photo Printer can print on standard paper and adhesive paper (including 16 Pre-Cut Adhesive paper). Do not use other types of paper, since doing so could cause paper jams or other malfunctions. Use the special Print Set and Video Print Ink Cassette when printing. (p.11)


Q18: Can the Digital Photo Printer print images continuously?

A18: If "PRINT" is set in MENU Mode, up to 10 sheets can be printed continuously. (p.16, 32)

Q19: How many sheets can be printed with a single Ink Cassette?

A19: An Ink Cassette can print the number of sheets that are included in the same Print Set. For example, the Print Set PV-MPS50 is intended for 50 sheets, and so the Ink Cassette can print 50 sheets. Ink Cassettes cannot be rewound and used again.

Q20: What kinds of Ink Cassettes and printing paper can I use with the Digital Photo Printer?

A20: Use Print Sets that bear either the  mark or have been designated by Panasonic as suitable for this Digital Photo Printer.

Questions and Answers (Cont.)

■ About Computers

● Windows and Macintosh

Q21: What is an OS?

A21: OS is an abbreviation for Operating System, and it is also sometimes called "basic software". The OS is the basic software provided for allowing the computer to be used easily. For example, operations such as reading data or displaying text cannot be performed only with other software. The OS performs these operations through commands from the software. The OS for PC/AT computers is Windows 3.1 or Windows 95, and the OS for Macintosh computers is the Mac OS (System).

Q22: What are applications (software)?

A22: This is software for performing specific tasks in a computer. Applications include, for instance, word-processing and spreadsheet software.

Q23: What is an interface?

A23: An interface is a means of connecting two or more different devices. Interfaces are used in a variety of contexts, including between computers and external devices, and computers and humans. For example, interfaces include connection cables, connection sockets, and keyboards.

Q24: What is resolution?

A24: The resolution indicates how many dots can be displayed on a screen. The resolution is shown in dots per inch, and the higher the resolution, the better the printing quality.

Q25: What is dpi?

A25: The dpi is a unit of resolution which indicates the number of dots per inch that can be printed. Higher dpi allows more detailed printing.

Q26: What is a printer port?

A26: A printer port is a socket for connecting a printer to other devices. It is provided at the rear of the computer. Printer ports are classified into the following two types based on the transmission system.

● Serial port

A serial port is an input/output socket for connecting peripheral devices which allow only one bit of data to be sent at a time, such as a mouse or modem.

● Parallel port

A parallel port is an input/output socket for connecting peripheral devices which transfer data by simultaneously sending a number of bits over separate lines. Although the parallel port allows data transfer at a higher speed than the serial port, transfer cannot be performed over long distances since interference will result between the data lines.

This port is usually used to connect a printer to a computer. In general, printing with a Windows computer uses a parallel port, while printing with a Macintosh computer uses a serial port.

Q27: What is memory?

A27: The memory is a temporary storage location for data when the computer performs operations. Memory can be broadly divided into RAM and ROM. RAM is an acronym for random-access memory, a type of memory which allows data to be read and stored freely. Software programs and entered data are stored in RAM. ROM, on the other hand, stands for read-only memory, a special type of memory which only allows data to be read. The ROM contains fixed data for programs of the particular computer.

Q28: What is a bitmap?

A28: A bitmap is a type of standard used for storing graphics created by the computer as a file. The graphics file is stored as a collection of extremely small dots.

Q29: What is a dialogue box?

A29: A dialogue box is a specialized window on Windows and Macintosh screens for displaying specific information and soliciting a needed response.

Q30: What is a printer driver?

A30: A printer driver is a program used to control how the computer and printer interact. The printer driver provides the printer interface and font designation, functions of the installed printer, and other necessary information to Windows and Macintosh systems.

Q31: Can the Digital Photo Printer print text created with word-processing software so that titles can be added to photographs and other images in the computer?

A31: Text created with image-handling software (graphics software: painting software, drawing software, photograph retouching software) can also be printed with the image.

Q32: Can the Digital Photo Printer print video scenes shot with a Video Camera?

A32: You can print video scenes if your computer includes a video capture board (device which digitalizes video signals before sending them to the computer).

Also, when images shot with a Digital Video Camera are sent to the computer, they can be printed with the Digital Photo Printer. For Panasonic Digital Video Cameras, a Personal Computer Connection Kit (sold separately).

This kit allows data to be sent to the computer. (However, this kit can only be used for Digital Video Cameras equipped with a Digital Still-Frame Socket.)

•Macintosh

Q33: What is AppleTalk?

A33: AppleTalk is the name of the LAN (local area network: an in-house computer network connecting a number of computers, printers, and other devices together) system standards and the network software for Macintosh computers.

Q34: What is LocalTalk?

A34: LocalTalk is a LAN standard for Appletalk that allows a computer network to be formed by simply connecting Macintosh computers together with a special cable.

You cannot connect to a printer port when using a LocalTalk network. In this case, the modem port must be used. However, by setting "AppleTalk" to "Not Used", you can cut off the LocalTalk network connections and then use the printer port.

Q35: What is PICT?

A35: PICT is the standard format for Apple's graphics files.

Q36: What are the major computers capable of supporting high-resolution printing?

A36 :The following computers are compatible with this Digital Photo Printer.

Macintosh series computers with a 68030 or faster CPU

However, PPC603, 603eCPU, and 68030 CPU systems can also be used for high-resolution printing by setting the transmission method to "Customize".

Before Requesting Service

Symptom	Cause	Remedy
The power cannot be switched on.	<ul style="list-style-type: none"> •The power plug is not plugged in correctly. 	<ul style="list-style-type: none"> •Insert the power plug all the way into a wall outlet.
No picture appears on the television screen. (video input)	<ul style="list-style-type: none"> •The external video source is not connected properly. 	<ul style="list-style-type: none"> •Connect the external video source correctly. (p.9)
	<ul style="list-style-type: none"> •A device is connected to an S-VIDEO IN Socket, but you are attempting to use a VIDEO IN Socket. 	<ul style="list-style-type: none"> •Unplug the S-Video Cable connected to the S-VIDEO IN Socket.
	<ul style="list-style-type: none"> •The INPUT SELECT (VIDEO / PC CARD) Switch is set to "PC CARD". 	<ul style="list-style-type: none"> •Set to "VIDEO". (p.14)
The printer does not print.	<ul style="list-style-type: none"> •The Ink Cassette is not oriented properly, or was not pushed all of the way in. 	<ul style="list-style-type: none"> •Insert the Ink Cassette correctly. (p.13)
	<ul style="list-style-type: none"> •There is slack in the ink film. 	<ul style="list-style-type: none"> •Take up the slack in the ink film. (p.12)
	<ul style="list-style-type: none"> •The Paper Cassette is not oriented properly, or was not pushed all of the way in. 	<ul style="list-style-type: none"> •Insert the Paper Cassette correctly. (p.13)
	<ul style="list-style-type: none"> •The paper was loaded upside-down. 	<ul style="list-style-type: none"> •Load the paper correctly. (p.12)
	<ul style="list-style-type: none"> •The internal temperature of the printer is too high. 	<ul style="list-style-type: none"> •Wait.
Printing is not of the expected quality.	<ul style="list-style-type: none"> •The paper being used is not of the specified type. 	<ul style="list-style-type: none"> •Use the specified paper. (p.11)
	<ul style="list-style-type: none"> •The paper was not loaded correctly. 	<ul style="list-style-type: none"> •Load the paper correctly. (p.12)
	<ul style="list-style-type: none"> •The ink film or paper is dirty. 	<ul style="list-style-type: none"> •Use clean supplies.
	<ul style="list-style-type: none"> •Condensation has formed. 	<ul style="list-style-type: none"> •Wait.
The printed colors are not right.	<ul style="list-style-type: none"> •The print image has not been adjusted correctly. 	<ul style="list-style-type: none"> •Adjust the print image correctly. (p.18)
The printed pictures are distorted.	<ul style="list-style-type: none"> •The printer is located near a television, video game machine or other source of electromagnetic waves. 	<ul style="list-style-type: none"> •Move the printer so that it is at least one meter away from the television, video game machine, etc.
	<ul style="list-style-type: none"> •The printer is located near a stereo speaker, large motor, or other source of a strong magnetic field. 	<ul style="list-style-type: none"> •Move the printer away from the device generating the magnetic field.
Pressing the MEMORY Button does not store the picture in memory.	<ul style="list-style-type: none"> •The MENU Screen is displayed. 	<ul style="list-style-type: none"> •Press the ENTER Button. (p.17)
	<ul style="list-style-type: none"> •A picture stored in memory is displayed on the television screen due to the MONITOR Button settings. 	<ul style="list-style-type: none"> •Press the MONITOR Button to display the video source picture on the screen. (p.15)
The printer does not respond when a button is pressed.	<ul style="list-style-type: none"> •The internal temperature of the printer is too high. 	<ul style="list-style-type: none"> •Wait.
	<ul style="list-style-type: none"> •Printing is in progress. 	<ul style="list-style-type: none"> •Wait until printing is complete.
Paper jams occur frequently.	<ul style="list-style-type: none"> •More than 25 sheets of paper have been loaded in the Paper Cassette. 	<ul style="list-style-type: none"> •Do not place more than 25 sheets of paper in the Paper Cassette.
	<ul style="list-style-type: none"> •More than 10 sheets of paper have accumulated in the Print Exit. 	<ul style="list-style-type: none"> •Do not allow more than 10 sheets to accumulate in the Print Exit.
	<ul style="list-style-type: none"> •The paper is creased or curled. 	<ul style="list-style-type: none"> •Do not use creased or curled paper.

Symptom	Cause	Remedy
The MENU Screen does not appear.	•The Photo Printer is not connected properly to the television.	•Connect the printer to the television correctly. (p.9)
	•Printing is in progress.	•Wait until printing is complete.
No picture appears on the television screen. (PC Card input)	•The CF Card or Smart Media is not correctly inserted in the adapter.	•Insert correctly. (p.26)
	•The PC Card is not correctly inserted in the printer.	•Insert correctly. (p.27)
	•The INPUT SELECT (VIDEO / PC CARD) Switch is set to "VIDEO".	•Set to "PC CARD". (p.28)
	•A card with an incompatible format is being used.	•This card cannot be used with this printer.
It takes time for the image to appear.	•Depending on the image system for storing the images in the PC Card and its capacity, it can take 20 to 30 seconds to display the image.	•This is not a malfunction.
Multiple images from the PC Card cannot be all printed at once.	•Multiple images are not stored in the PC Card.	•Use a PC Card with multiple images stored.
Images in the PC Card cannot be erased, or cannot be all erased at once.	•There are no images stored in the PC Card.	•You cannot erase.
	•The image is set to write-protect in the camera or computer.	•Change the write-protect setting in the camera or computer, and then erase.
	•Images can only be erased one at a time.	—
Video images cannot be recorded in the PC Card.	•The INPUT SELECT (VIDEO / PC CARD) Switch is set to "PC CARD".	•Set to "VIDEO". (p.38)
	•The PC Card is set to write-protect.	•Set the PC Card to write-enable.
	•The PC Card is full.	•Either erase unneeded images (p.38) or use another PC Card with sufficient capacity.
The video image was stored in the PC Card, but the image is not clear.	•In some cases, image compression may deteriorate the quality of image when storing.	•This is not a malfunction.
The printer cannot be used as a computer printer.	•The printer and computer are not connected correctly.	•Connect the printer and computer correctly. (p.46)
	•You are not using the proper PC Connection Cable for your computer.	•Use the PC Connection Cable (supplied) for your computer. (p.46)
	•The printer driver software is not installed or is not installed correctly.	•Refer to the separate Printer Driver Manual.

Error Messages

When an error occurs, an error message appears in the center of the television screen to notify you. The ERROR Lamp also flashes.

Error Message	Remedy
SET PAPER AND PUSH [PRINT]	Insert the printing paper correctly. (p.12, 13)
SET PAPER (when using as a computer printer)	Insert the printing paper correctly. (p.12, 13)
CHECK PAPER TYPE REMOVE JAMMED PAPER	Remove the jammed paper (p.15) and insert the specified printing paper (p.11).
CHECK PAPER TYPE SET PAPER PROPERLY AND PUSH [PRINT]	Insert the specified printing paper (p.11) correctly. (p.12, 13)
NO PAPER CASSETTE	Insert the Paper Cassette. (p.13)
REMOVE JAMMED PAPER	Remove the jammed paper. (p.15)
NO INK	Replace the Ink Cassette with a new one. (p.13)
CHECK INK TYPE	Use the specified Ink Cassette. (p.11)
NO INK CASSETTE	Insert the Ink Cassette. (p.13)
WAIT	Wait for a moment.
WAIT:COOLING	Internal temperature (p.49)
NO CARD	Insert the card. (p.27)
CAN NOT USE THIS CARD	Insert a card which can be used. (p.26)
CAN NOT RECORD	Either the card is full or an incompatible card is being used. Either erase unneeded images (p.38), or use another card.
CAN NOT DELETE	No images are recorded on the card.
NO IMAGE IN THIS CARD	Use a card with images recorded on it.

• If F00 or other error message appears, contact your nearest Panasonic dealer.

Specifications

Information for Your Safety

Power Supply	AC 120 V 50 / 60 Hz
Power Consumption	During printing: Approx. 0.9 A

Printing System	Thermal sublimation transfer printing system
Printing Speed	Approx. 95 sec./ sheet (Video Mode)
Picture Memory	8-bit, 1 frame
Print Media	
• Ink Film	Cassette type (exclusive), 3 color field successive printing (yellow, magenta, cyan)
• Printing Paper	Cut sheets 100×148 mm (postcard size) Screen dimensions: Video mode: 82×108 mm Card mode: 85×112 mm Computer mode: 85×113 mm
Paper Feeding System	Automatic paper feed (holds 25 sheets of standard paper or adhesive paper)
Picture Quality	256 color gradations

Number of Printing Pixels	Video mode: 464×672 dots (frame and field), 144×158/dpi Card mode: 478×700 dots, 144×158/dpi Computer mode: 480×640 dots (standard and high-speed), 144×144/dpi 480×1280 dots (high resolution), 144×288/dpi
Number of Copies	Video/Card mode: Max. 10 sheets Computer mode: Max. 99 sheets
Functions	Video mode: Single Screen, Album Print, Strobe Print, Multi Frame Print, Title, Wide, Card Storage Card mode: Single Screen, Album Print, Multi Frame Print, Title, Card Erase, Auto Print Computer mode: Single Screen, Multi Frame Print Film Thermal Head 5.65 dots/mm
Print Head	
Input Socket	
•S-VIDEO IN Socket	Y (luminance signal) 1 Vp-p, 75 ohm, C (color signal) 0.3 Vp-p, 75 ohm (front: 1)
•VIDEO IN Socket	RCA pin socket 1 Vp-p, 75 ohm (front: 1)
•EDIT Socket	(front: 1)
•PARALLEL Socket	Centronics standard 36 pin (rear: 1)
•SERIAL Socket	Macintosh serial port 8 pin (rear: 1)
•PC Card	PC Card type II (CF card and Smart Media are compatible with the adapter.) (front: 1)
•Input Switch	Video mode: S-VIDEO takes precedence when both S-VIDEO and VIDEO are connected. Computer mode: When both the SERIAL Socket and PARALLEL Socket are connected, you can switch to the side to be used.
Output Socket	
•VIDEO OUT Socket	RCA pin socket 1 Vp-p, 75 ohm (rear: 1)
Compatible Computers	
•Windows	PC/AT compatible system with i486SX or faster CPU OS: Windows 95, Windows 3.1 Memory: 16 MB or more (Windows 95) 8 MB or more (Windows 3.1)
•Macintosh	Macintosh series with 68030 or faster CPU OS: System 7 or later Memory: 8 MB or more
Compatible PC Cards	
•Standards	PCMCIA2.1 / JEIDA4.2 and PCMCIA ATA 1.02 standard
•Format	JPEG baseline system (JFIF, EXIF, SISRIF)
•Number of Pixels	320×240 (QVGA) to 1536×1024 (4BASE) Sampling ratio 4:4:4, 4:2:2, 4:2:0, 4:1:1
•Recorded Image	JPEG baseline system JFIF 4:2:2
•Number of Recorded Images	Approx. 20 images (2-MB card) Approx. 40 images (4-MB card) Approx. 10 seconds (VGA image)
•Decompression Time	
Allowable Operating Temperature	5 °C - 35 °C (41 °F - 95 °F)
Allowable Operating Humidity	35% - 60%
External Dimensions	Approx. 9 ⁷ / ₈ " (W)×3 ⁹ / ₁₆ " (H)×10 ⁵ / ₈ " (D) [Approx. 250 (W)×89.5 (H)×269.5 (D) mm]
Weight	Approx. 5.28 lbs (2.4 kg)

Warranty

Panasonic Consumer Electronics Company, Division of Matsushita Electric Corporation of America
One Panasonic Way Secaucus,
New Jersey 07094

Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc.
Ave. 65 de Infantería. Km. 9.5
San Gabriel Industrial Park, Carolina, Puerto Rico 00985

PANASONIC / QUASAR Video Products Limited Warranty

Panasonic Consumer Electronics Company of Panasonic Sales Company (collectively referred to as "the Warrantor") will repair this product with new or refurbished parts, free of charge, in the USA or Puerto Rico, in the event of a defect in materials or workmanship as follows (all time periods commence from the date of the original purchase):

PRODUCT

DIGITAL PHOTO PRINTER

PARTS

ONE (1) YEAR

LABOR

NINETY (90) DAYS

Batteries (if included) - New rechargeable batteries in exchange for defective rechargeable batteries for ten (10) days. Non-rechargeable batteries are not warranted.

Tape (if included) - New video cassette tape in exchange for a defective video cassette tape for five (5) days. In-home, carry-in or mail-in service, as applicable, in the USA can be obtained during the warranty period by contacting a Panasonic Services Company (PASC) Factory Servicenter listed in the Service Directory. Or call toll free 1-800-272-7033, to locate an authorized PASC Servicenter. Carry-in or mail-in service in Puerto Rico can be obtained during the warranty period by calling the Panasonic Sales Company telephone number listed in the Servicenter Directory. This warranty is extended only to the original purchaser. A purchase receipt or other proof of the date of the original purchase is required before warranty service is rendered.

This warranty only covers failures due to defects in materials and workmanship which occur during normal use and does not cover normal maintenance, including, but not limited to, video and audio head cleaning, and does not cover consumable materials such as printing paper and ink cassette. The warranty does not cover damage which occurs in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, modification, faulty installation, set-up adjustments, improper antenna, inadequate signal pickup, maladjustment of consumer controls, improper operation, power line surge, improper voltage supply, lightning damage, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or service by anyone other than a PASC Factory Servicenter or a PASC authorized Servicenter, or damage that is attributable to acts of God.

LIMITS AND EXCLUSIONS

There are no express warranties except as listed above. THE WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES) RESULTING FROM THE USE OF THIS PRODUCTS, OR ARISING OUT OF ANY BREACH OF THE WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the Customer Satisfaction Center at the Panasonic Consumer Electronics Company address above.

SERVICE CALLS WHICH DO NOT INVOLVE DEFECTIVE MATERIALS OR WORKMANSHIP AS DETERMINED BY THE WARRANTOR, IN ITS SOLE DISCRETION, ARE NOT COVERED.

COSTS OF SUCH SERVICE CALLS ARE THE RESPONSIBILITY OF THE PURCHASER.

warvid 10/24/97

Servicenter Directory

For Product Information, Operating Assistance, Literature Request, Dealer Locations, and all Customer Service inquiries please contact:

1-800-272-7033, Monday-Friday 9am-8pm EST.

Web Site: <http://WWW.Panasonic.com>

You can purchase parts, accessories or locate your nearest servicenter by visiting our Web Site.

Product Repairs

Centralized Factory Servicenter

MAIL TO:

Panasonic Services Company

6550 Katella Avenue

Cypress, CA 90630

Attention: Digital Photo Printer

Please carefully pack and ship, prepaid and insured, to the Cypress centralized repair Factory Servicenter. While there will be added handling delays, you may bring your unit to one of the following locations who will then forward the unit to Cypress for repair.

Customer's in Puerto Rico, please ship or carry in to location below ("Service in Puerto Rico").

Factory Servicenter Locations

CALIFORNIA

800 Dubuque Avenue
S. San Francisco,
CA 94080

20201 Sherman Way
Suite 102
Canoga Park, CA 91306

3878 Ruffin Road
Suite A
San Diego, CA 92123

COLORADO

1640 South Abilene Street
Suite D
Aurora, CO 80012

FLORIDA

3700 North 29th Avenue
Suite 102
Hollywood, FL 33020

GEORGIA

8655 Roswell Road
Suite 100
Atlanta, GA 30350

ILLINOIS

1703 North Randall Road
Elgin, IL 60123
(Pick-up / Drop-off only)

9060 Golf Road
Niles, IL 60714

MARYLAND

62 Mountain Road
Glen Burnie MD 21061

MASSACHUSETTS

60 Glacier Drive,
Suite G
Westwood, MA 02090

MICHIGAN

37048 Van Dyke Avenue
Sterling Heights, MI 48312

MINNESOTA

7850-12th Avenue South
Airport Business Center
Bloomington, MN 55425

OHIO

2236 Waycross Road
Civic Center Plaza
Forest Park, OH 45240

PENNSYLVANIA

2221 Cabot Blvd. West
Suite B
Langhorne, PA 19047

Chartiers Valley
Shopping Center
1025 Washington Pike
Bridgeville, PA 15017

TENNESSEE

919-8th Avenue South
Nashville, TN 37203

TEXAS

7482 Harwin Drive
Houston, TX 77036

13615 Welch Road
Suite 101
Farmers Branch,
TX 75244

WASHINGTON

20425-84th Avenue South
Kent, WA 98032

HAWAII

99-859 Iwaiwa Street
Aiea, Hawaii 96701
Phone (808) 488-1996
Fax (808) 486-4369

Service in Puerto Rico

Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company / Factory Servicenter:

Ave. 65 de Infantería. Km. 9.5 San Gabriel Industrial Park Carolina, Puerto Rico 00985

Phone (787) 750-4300 Fax (787) 768-2910

Accessory Purchases:

Customer orders Only 1-800-272-7033

As of October '97

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